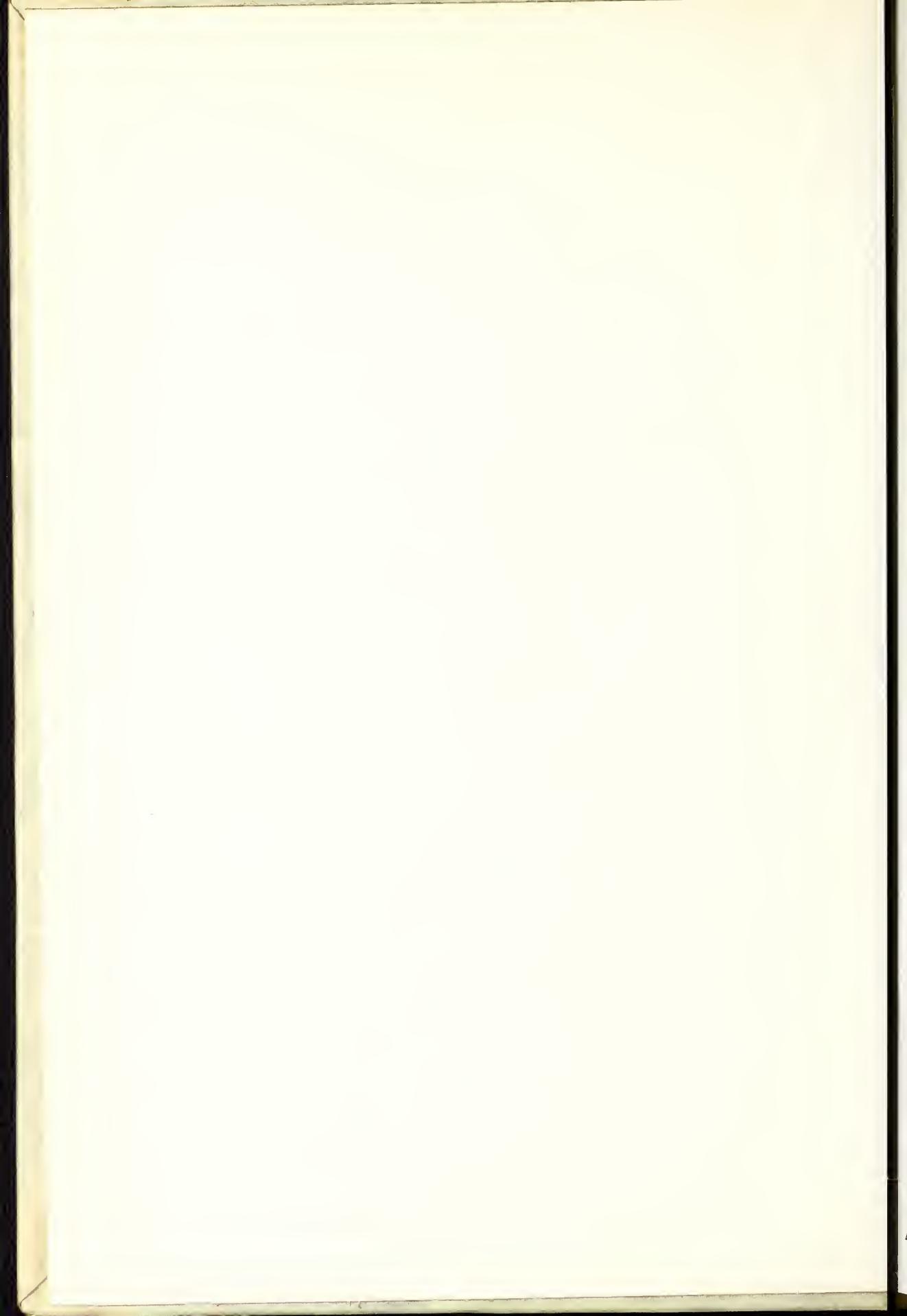


The Graduate Catalog

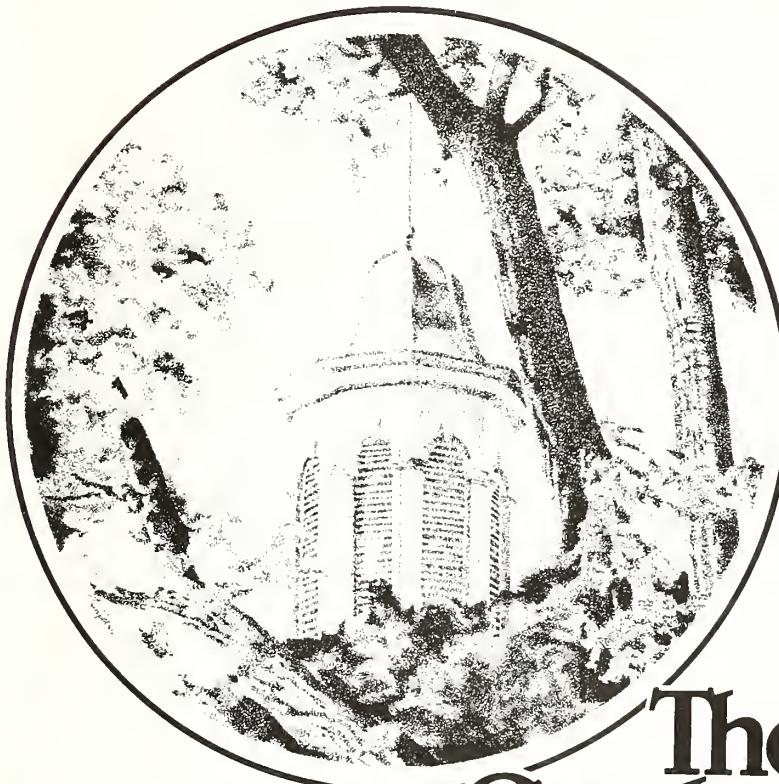
Illinois State University

1977-78



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**The
Graduate
Catalog
Illinois State University
1977-78**

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University Calendar

1977-1978

1977 Summer Sessions

May 16	Opening of Presession.	October 19	Classes resume, 8 a.m. Second nine-week classes begin.
June 20	Opening of and registration for eight-week session.	November 23	Thanksgiving vacation begins at noon.
June 24	Last day for late registration.	November 28	Classes resume, 8 a.m.
June 27	Last day to apply to department.	December 5	Last day to file theses in Graduate Office for December graduation.
July 1-4	Independence Day holiday.	December 10-16	Evaluation and review period.
July 8	Last day to apply for graduation in August.		
July 8	Foreign language proficiency examinations.		
July 29	Last day to drop a course.		
August 1	Last day to file theses in Graduate Office for August graduation.		
August 11-12	Evaluation and review period.		

1977 First Semester

August 18-19	Registration. See class schedule booklet for specific registration schedule.	January 9	Classes begin.
August 18	Registration for late afternoon, evening and Saturday classes. See class schedule booklet for specific registration schedule.	January 13	Last day for late registration and course changes.
August 22	Classes begin.	January 18	Plan of Study and Thesis Proposal due in Graduate Office of any student graduating in May. Last day to apply to departments to take comprehensive examinations.
August 26	Last day for late registration and course changes.	February 17	Last day to apply for graduation in May.
August 31	Plan of Study and Thesis Proposal due to Graduate Office of any student graduating in December. Last day to apply to departments to take comprehensive examinations.	March 3	Foreign language proficiency examinations.
September 5	Labor Day holiday.	March 17	Spring vacation begins, 5 p.m.
September 30	Last day to apply for December graduation.	March 27	Classes resume, 8 a.m.
October 7	Foreign language proficiency examinations.	May 1	Last day to file theses in Graduate Office for May graduation.
October 14	Last day of nine-week classes.	May 6-12	Evaluation and review period.
October 15	Mid-semester break begins at noon.		

1978 Second Semester

May 15-June 16	Presession.
June 19-Aug. 11	Eight-week session.
July 4	Holiday.

Board of Regents

J. Robert Barr (Evanston) Chairman
 David E. Murray (Sterling) Vice-Chairman

Appointed Members

1971-1977

J. Robert Barr Evanston
 Charles B. Shuman Sullivan
 Mrs. Warren F. Spencer Evanston

1972-1975

James M. Patterson Olympia Fields

1973-1979

Michael J. Brady Springfield
 Mrs. Eleanor R. Suggs Phoenix

1974-1979

Guy C. Prisco Aurora

1975-1981

Dan M. Martin Chicago
 David E. Murray Sterling

Ex-officio Member

Joseph M. Cronin, State Superintendent of Education Springfield

Students

Douglas Kanholz Springfield
 Dale Person DeKalb
 Patricia S. Stone Normal

Executive Director

Franklin G. Matsler Springfield

Illinois State University is governed by the Board of Regents. The Board consists of 13 members, nine appointed by the Governor for terms of six years and the State Superintendent of Education who is ex-officio. Three student members are appointed by the Governor and serve in non-voting capacities.

University

Administrative Officers

President	Gene A. Budig
Vice President and Provost	James M. Horner
Associate Provost and Dean of Undergraduate Instruction	Stanley G. Rives
Dean of the Graduate School and Chairman of the Graduate Council	Charles A. White
Dean, College of Applied Science and Technology	Jack E. Razor
Acting Dean, College of Arts and Sciences	C. Edward Streeter
Dean, College of Business	E. Frank Harrison
Dean, College of Education	Robert A. Burnham
Dean, College of Fine Arts	Charles W. Bolen
Dean, College of Continuing Education and Public Service	Harold D. Crouse
Vice President and Dean of Student Affairs	Neal R. Gamsky
Vice President for Business and Finance	Francis B. Belshe
Secretary of the University	Charles E. Morris

Members of the Graduate Council

Admissions Committee

Elizabeth McMahon	(1979)
Robert E. Potter	(1978)
John Kirk	(1978)
Gary Ramseyer	(1977)

Curriculum Committee

John F. Hanson	(1979)
Ronald L. Laymon	(1978)
Albert D. Otto	(1978)
Paul F. Mattingly	(1977)

Membership Committee

Wayne H. Zook	(1979)
Barry E. Moore	(1978)
Dorothy Lee	(1978)
Harry Huizinga	(1977)

Research Committee

Charles P. Frahm	(1979)
Charles L. VandenEynden	(1978)
Tse-Kia Tcheng	(1978)
Ronald S. Halinski	(1977)

Newly elected and appointed members of the Graduate Council for 1977-78; their respective committees and terms of office appear below:

Admissions Committee

Benjamin C. Hubbard	(1980)
---------------------------	--------

Curriculum Committee

John A. Dossey	(1980)
----------------------	--------

Membership Committee

Dale E. Birkenholz	(1980)
--------------------------	--------

Research Committee

Joel G. Verner	(1980)
----------------------	--------



The University

Illinois State University was founded in 1857 as the first public institution of higher learning in Illinois.

The University has a proud heritage in that the documents establishing the pioneer educational undertaking were drafted by Abraham Lincoln.

Today, Illinois State University is, as its founders dreamed, a comprehensive institution with degree programs at the bachelor's, master's, specialist and doctoral levels.

Fifty-seven major fields of study are offered

in 28 academic departments which are organized into five colleges. The nearly 22,000 students have a full range of study options in business, liberal arts, science, fine arts, education, applied science, technology and pre-professional fields.

A library with collections totaling more than 1.5 million complements a modern academic complex of 54 major buildings on the 740-acre campus.

The Central Illinois community of Normal-Bloomington, home of Illinois State University, has a population of 75,000.

The Graduate School

The University began offering graduate work in 1943, when it introduced master's degree programs in several departments. Graduate work has expanded gradually since that time, with doctoral work being introduced in 1962.

Today the Graduate School offers master's degree work in more than thirty academic fields and professional education areas and offers a sixth year Specialist in Education degree in Educational Administration. The Master of Fine Arts degree is offered in Art and Theatre. Doctoral programs are offered in Art, Biological Sciences, Educational Administration, Economics, English, History, and Mathematics.

It is the chief aim of the Graduate School to provide an atmosphere in which competent students may join a qualified faculty in extending their fields of knowledge, and where they may share experience in research leading to professional improvement and scholarly achievement.

Accreditation

Illinois State University is accredited on the master's level by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education with the exception of the program in Secondary Teaching. Application for National Council for Accreditation of Teacher Education approval is being made. Its doctoral programs in Art, Biology, and Educational Administration were granted full accreditation by the North Central Association in March, 1973, and its sixth year and doctoral programs in Educational Administration were granted full accreditation by the National Council for the Accreditation of Teacher Education in 1970. Preliminary approval has been given to the Doctor of Arts program in Economics, English, History, and Mathematics. The four D.A. programs will be evaluated at the end of five (5) years. The University holds institutional memberships in the American Council on Education, the American Association of Colleges for Teacher Education, and the Council of Graduate Schools in the United States.

Library Resources

The new library building, opened for service on July 1, 1976, provides study space for 3,000

students and shelving for some 700,000 volumes. Each of the six floors of the Library is arranged to provide a variety of study areas — individual carrels, faculty studies, conference rooms, and lounge chairs — all located adjacent to books, periodicals, and other library materials. The subject-divisional arrangement enables students to find all materials pertaining to the humanities, the social sciences, the sciences, and education-psychology on separate floors. A General College Library on the main floor provides a smaller introductory collection for beginning students.

The collections of the University Library include 707,781 cataloged books and 219,105 U.S. Government publications, a total of 926,886 volumes. Many thousand additional publications are available in miniature in 38,000 reels of microfilm and 732,412 microcards and sheets of microprint. The Map Collection contains 230,381 maps and other cartographic items, and a record collection of 14,669 recordings is available.

The Library's membership in the Center for Research Libraries makes the resources of that 3,000,000-column collection available for members of the faculty and students. A teletypewriter in Milner Library links the Library with more than a hundred research libraries throughout the country, and a courier service brings books from the University of Illinois Library twice weekly.

Semester Plan and Summer Sessions

The University is operated on the semester plan and provides, in addition to its fall and spring semester, an eight-week summer session and a variety of short-term offerings.

In 1977 there will be a five-week session between the close of the spring semester and the opening of the eight-week summer session. During this session, a student may register for one, two, or three-hour courses at the rate of one hour of credit per week. A student may be scheduled for only one short course at any given time unless special permission has been granted.

Limited student teaching and internship facilities are available during the eight-week summer session for those who are qualified.

A graduate student may register for nine semester hours during the eight-week summer session.

The Summer Catalog is issued annually and may be obtained by writing to the Director of the Summer Sessions. The bulletin contains information on the cost of attendance, the schedule of classes, and special features of the summer sessions, such as short courses and workshops and other special offerings.

Evening, Saturday, Off-Campus Classes and Short Courses

In addition to courses offered during the

regular school day, evening and Saturday classes are scheduled on campus during the regular school year.

Selected graduate courses are offered at various off-campus centers throughout the year. **For courses offered by Illinois State University, no differentiation is made between credits earned on campus and off campus.** Inquiries concerning off-campus courses should be directed to the Dean of the College of Continuing Education and Public Service.

Short courses one or more weeks in duration and carrying one hour of credit per week are offered during the summer on campus.

Admission

Who May Apply

A student who has completed work for a bachelor's degree, or who will do so within one academic year at a college or university that is accredited by the appropriate regional accrediting association, may apply for admission to the Graduate School. While conditional admission may be granted to a senior, only those who have received a bachelor's degree will be permitted to register. Under certain conditions, however, seniors may be permitted to begin graduate work. See section on "Admissions to Master's Programs" on page 9.

Applications and Credentials

All students who wish to take work for graduate credit must submit a formal application for admission to the Graduate School. This includes students who have graduated from, or are attending this University. It also applies to those who wish to take university courses off-campus for graduate credit. Application forms and instructions are available from the Office of Admissions and Records, Hovey Hall.

When to Apply

A prospective student at the master's level should file an application and arrange for official transcripts to be sent at least three weeks before the date of registration. (Under special circum-

stances the Director of Admissions and Records may approve applications tentatively, pending receipt of official transcripts or action by the committee on admission. Conditional admission will not be granted for short courses, or pre-session.)

Applicants for admission to Master of Fine Arts, Specialist and Doctoral programs are encouraged to apply as early as possible. Two months should be considered as the minimum period between filing of applications and registration.

Readmission of Former Students

Graduate students who wish to return to the University after a lapse of one semester or more should apply for readmission through the Office of Admissions and Records at least seven days prior to the beginning of registration for the session which they wish to attend. A student who has attended another college or university during absence from the campus should request that institution to send a transcript of the student's work to the Office of Admissions and Records at this University.

Types of Admission

The University admits at the master's degree level three types of students who are eligible to enroll in graduate courses. These are (a) non-degree students, (b) provisional students, (c) degree students.

The University admits at the terminal degree level (D.A., Ed.D., M.F.A., Ph.D., and Specialist) one type of student eligible to take graduate courses for credit. This is the student admitted to a degree program.

Non-Degree Student

A **non-degree** student either (1) does not seek a degree but may want coursework for certification purposes, for general self-improvement, or for some other reason, or (2) is uncertain as to which master's degree program to pursue. A non-degree student may register for courses for which the student has the prerequisites, unless such registration is restricted by the department or the Dean of the Graduate School.

There is no guarantee that courses taken by a non-degree student may be used in meeting the requirements for a master's degree. Twelve (12) hours is the maximum that can be transferred into a master's degree program. Independent Study courses cannot be included in the twelve hours.

A non-degree student may apply to become a degree or provisional student on the master's level only. The admission requirements for the provisional student and degree student are stated below.

Provisional Degree Student

A **provisional** student declares intent to pursue a degree but does not meet admission requirements of either the Graduate School or the academic department. A provisional student who has applied for a master's degree program must have as a minimum a bachelor's degree from an accredited institution and at least a 2.4 grade point average (on a scale in which A equals 4) in the last sixty (60) hours of undergraduate work. A **provisional** student, upon completing twelve (12) semester hours, must request a transfer to a degree program through the Office of Admissions and Records. As a minimum requirement for acceptance into a degree program, the student must achieve a cumulative grade point average of B or better by the end of the semester during which the first twelve hours of graduate work are completed. The transfer must also be approved by the academic department and by the Graduate School in the same manner that initial applications are approved. If the student fails to obtain a B average, the student is discontinued under this option unless a written request from the department is approved by the Dean of the Graduate School. At least nine of the twelve (12) semester hours are to be in courses approved by

the student's major department. Independent Study courses cannot be included within the twelve hours. Courses taken under provisional status may be credited to a degree program if approved by the department and the Dean of the Graduate School. A provisional degree student may register for courses for which the student has the prerequisites, unless registration is restricted by the department or the Dean of the Graduate School.

Degree Student

A **degree** student is one who has been admitted formally to a program leading to a degree. For specific requirements refer to the individual degree descriptions in the **Graduate Catalog**.

Admission to Master's Programs

An applicant for a program leading to the master's degree is considered on the basis of the individual's academic record and other criteria that may include examinations, interviews and letters of recommendation. Tests for admission are described below.

An applicant with a superior academic record may be admitted directly to a degree program. No student is admitted to a degree program who does not have at least a 2.6 grade point average (on a scale in which A equals 4) in the last 60 hours of undergraduate work. A student who does not meet this standard but whose academic record and Graduate Record Examination scores give promise of high performance may be given a probationary period of enrollment as a provisional graduate student. In considering an applicant for any curriculum, there may be departmental requirements in addition to the general requirements of the University.

When an applicant is approved, the departmental adviser will indicate any courses that may be required to remove undergraduate deficiencies. The adviser also may specify certain graduate courses which will be required in addition to those listed in the catalog. The adviser will designate which, if any, of these courses may be used in meeting requirements for the degree.

A **senior in good standing** at this University may begin graduate work during the academic year in which the requirements for the bachelor's degree are completed, if the student

applies for and is admitted to the Graduate School. During a semester the student may not register for more graduate credit than the difference between 15 hours and the number of hours required to complete the bachelor's degree. It is understood that graduate credit may be received for graduate courses only if requirements for the bachelor's degree are completed during the semester or summer session in which the student begins graduate work. This opportunity is also extended to last semester seniors of other universities who find it possible to take graduate work at this University while completing requirements for the bachelor's degree on their own campuses. Interested students should write to the Dean of the Graduate School for further information.

Admission to Master of Fine Arts in Art and Theatre

All regular criteria for admission to the Graduate School of the University and for graduate study in Art and Theatre will apply.

Admission to the Master of Fine Arts programs in Art and Theatre normally will occur on petition of the student after he is enrolled in a graduate program. Usually the petition will be considered after one semester of graduate study.

In the **Department of Art**, graduate students must be accepted by the Department of Art. This will require the submission of a portfolio of the student's work, an example of scholarly writing and three letters of recommendation. This material will be reviewed by the members of the studio faculty in the student's intended area of concentration. After final admission evaluations have been completed, Admissions and Records will notify the student of admission to the Master of Fine Arts Program.

The student not recommended for admission to the Master of Fine Arts will receive an evaluation of his/her deficiencies. The evaluation committee will prescribe courses or other experiences to remove the deficiencies. After removing the deficiencies the student may reapply for admission. A student may reapply for admission only once.

In the **Department of Theatre**, graduate students who hold no master's degree will be admitted to the Master of Fine Arts program

only after completing 12 graduate hours in theatre courses at Illinois State University or upon recommendation of the department's graduate faculty. After completing 12 hours, the student will be permitted to audition by portfolio and performance. The audition will be evaluated by the graduate faculty. A written evaluation of the candidate will be presented to the department chairperson. If the student is not recommended for admission he/she will receive an evaluation of deficiencies; the evaluation committee will prescribe courses or other experiences to remove the deficiencies. A student may reapply for admission only once.

Admission to Specialist and Doctoral Programs

A student seeking admission to a specialist or doctoral degree program must present letters of recommendation and must take qualifying examinations before being admitted to the program. The student may be required to come to the campus for an interview. Tests for admission are described below.

Admission of an applicant to a specialist or doctoral program will take account of personal and professional qualifications as well as scholastic records and measurement of academic ability. Admission involves approval by the department as well as the Graduate School.

Tests Required for Admission

Master's Programs

All students seeking admission to master's degree programs in the Departments of Economics, Geography, Health, Physical Education and Recreation, Political Science, and Psychology must submit scores on the Aptitude Test of the Graduate Record Examination. Applicants to the Departments of Economics, Geography, and Psychology should also submit scores on the Advanced Test in their field of study. Students seeking admission to Business departments should substitute the Graduate Management Admission Test for the above examination. Arrangements for taking these examinations can be made locally in the Measurement and Evaluation Office, 115 Julian Hall or by writing to

Educational Testing Service at either Box 955, Princeton, New Jersey 08540, or 1947 Center Street, Berkeley, California 94704.

Master of Fine Arts Program

Students seeking admission to M.F.A. programs should consult pages 21 through 23.

Specialist and Doctoral Programs

All students seeking admission to specialist and doctoral programs must submit scores on the Aptitude Test of the Graduate Record Examination and the appropriate advanced test. Information concerning this examination may be obtained at testing centers or by writing to Educational Testing Service at either Box 955, Princeton, New Jersey 08540, or 1947 Center Street, Berkeley, California 94704.

An English Usage Test also is required. Arrangements for taking these examinations either locally or at other testing centers can be made locally in the Measurement and Evaluation Office, 115 Julian Hall, Illinois State University.

English Examination for International Students

Illinois State University requires that students from non-English speaking countries who seek admission to the Graduate School must take the "Test of English as a Foreign Language." Students wishing to take this examination should write to TOEFL, Educational Testing Service, Princeton, New Jersey 08540. They will be informed as to testing centers nearest their homes and the dates on which the examination will be offered. Following the completion of the examination they should ask the Educational Testing Service to send test scores to the Graduate School, Illinois State University, Normal, Illinois 61761.

Admission to Teacher Education Programs

Students who have been admitted to the Graduate School and who wish to take work leading to certification for public school positions in Illinois should send or take transcripts of their past work, plus a \$10.00 certified check or money order, to the nearest Superintendent of an Educational Service Region requesting an eval-

uation for the particular certificate in which they are interested. The Superintendent of the Educational Service Region will forward the check and formal application to the State Teacher Certification Board. Students should not write directly to the State Teacher Certification Board.

All students seeking to complete certification requirements at Illinois State University must meet University standards for teacher education programs. Students who wish to enroll in student teaching must file an official application for Admission to a Teacher Education Program in the Office of Clinical Experiences and Admission - Retention in Teacher Education, 309 DeGarmo Hall, be admitted to a Teacher Education Program by stated deadline dates, and meet all requirements as outlined for Admission in the *Undergraduate Catalog* by stated deadline dates prior to being assigned to do their student teaching.

Procedures for Admission

Application forms for Admission to Teacher Education are obtained from the Office of Clinical Experiences and Admission-Retention in Teacher Education, 309 DeGarmo Hall. Students must obtain and complete the forms and return them to the Office by established and publicized deadlines.

Student Teaching

Application forms for Student Teaching are obtained from the Office of Clinical Experiences and Admission-Retention in Teacher Education, 309 DeGarmo Hall. Students must be formally admitted to a Teacher Education Program by stated deadline dates and must complete all professional education requirements by stated deadline dates prior to being assigned to do their student teaching. The Application for Student Teaching is a separate application from the Application for Admission to Teacher Education.

Graduate students who wish to do their student teaching must file an official Application for Admission to a Teacher Education Program and be admitted to a Teacher Education Program by stated deadline dates. Graduate students should refer all questions related to Admission to Teacher Education and Student Teaching to the Office of Clinical Experiences and Admission-Retention in Teacher Education, 309 DeGarmo Hall.

Additional information related to Assignment to Student Teaching can be found in the current *Undergraduate Catalog*.

Cost and Living Accommodations

Fees—Residents of Illinois

Tuition and registration fees must be paid at or near the opening dates of the semester by the dates specified in the class schedule booklet. All fees are subject to change without notice because action regarding them may be taken after publication of this catalog.

Each Semester

For students who register for 12 or more semester hours:

Tuition	\$202.00
Activity and General Service fee	33.50
Student Insurance	16.50
University Union fee	28.00
Recreational facilities fee	9.00
Health Service fee	15.00

	\$304.00

For students who register for fewer than 12 hours:

Tuition per hour	\$18.00
General Service fee**	10.00
University Union fee	14.00

Eight-Week Summer Session

Full time (6 or more hours)

Tuition	\$101.00
Activity and General Service fee	16.00
Student Insurance	8.00
University Union Fee	14.00
Recreation Facilities fee	4.50
Health Service fee	7.50

	\$151.00

***Part time (less than 6 hours)

Tuition per hour	\$18.00
General Service fee***	8.00
University Union fee	7.00

Pre-Session and Short Courses

Tuition per hour	\$18.00
University Union fee per course	4.00

Auditors

Fees for students who take all courses as auditors without credit:

Tuition per hour	\$ 18.00
Maximum charge for a semester	202.00
Maximum charge for eight - week summer session	101.00

Other Fees and Expenses

Graduation fee	\$15.00
Must be paid before published deadline	
Late registration and/or late payment fee	\$10.00
Charged after scheduled dates	
Transcript of record	1.00
Transcripts are issued only when all obligations have been met.	
Locker and towel fee for students in physical education courses (\$3.00), refunded when padlock is returned	2.00
Doctoral dissertation fee (microfilming)	30.00

Fees—Out-of-State Students

A student who is not a resident of Illinois pays the non-resident tuition fee indicated below. All other fees are the same for non-residents.

A student under 18 years of age is considered a non-resident if the student's parents are not legal residents of Illinois. A student over 18 years of age is considered a non-resident if the student is not a legal resident of Illinois at the time of registration. The Director of Admissions and Records is responsible for applying out-of-state fees. Tuition and fees are subject to change by action of the Board of Regents of the General Assembly.

Each Semester

Non-resident tuition 12 or more semester hours	\$532.50
Non-resident tuition, fewer than 12 hours, per hour	45.00

Eight-Week Summer Session

Non-resident fees, more than three semester hours	\$266.25
Non-resident tuition, three semester hours or less, per hour	45.00

*Graduate Assistants and Fellowship holders, see page 14.

**Students registered for more than six but fewer than 12 hours may purchase an activity ticket by paying the Activity and General Service fee of \$33.50 instead of the \$10 General Service fee. Students registered for fewer than 12 hours may also pay the Student Health Service fee within the first ten days of the semester in order to obtain the services provided.

***A student registered for three or more hours but fewer than six hours may purchase an activity ticket by paying the Activity and General Service fee of \$16.00 instead of the \$8.00 General Service fee. Payment of the \$16.00 Activity and General Service fee, however, does not extend the privilege of playing at the Golf Course at student rates. Students registered for fewer than six hours may also pay the Student Health Service fee of \$7.50 within the first ten days of the session in order to obtain the services provided.

Student Health and Accident Insurance

Each student admitted to the graduate program who is enrolled for nine or more hours is assessed a fee to purchase a health and accident insurance policy. This policy provides for 100 percent payment of the first \$500 of in-patient hospital expenses and 80 percent of such expense above \$500. Outpatient emergencies are covered 100 percent to a maximum of \$300. Non-emergency outpatient services are generally covered at 80 percent to a maximum of \$300. It covers 80 percent of the reasonable expense for a surgeon or certain physicians' fees other than those for surgery. There is also an allowance for consultation and ambulance fees. The maximum amount payable for any one accident or sickness is \$10,000. The student's coverage is effective on the date on which University classes begin.

Those students who can produce evidence of equal or better coverage may apply for a refund of the insurance fee by contacting the Office of University Insurance. Application must be sub-

mitted within ten class days following the date on which University classes begin.

Coverage for a student's spouse and children may be obtained at an additional cost in the Office of University Insurance if applied for within 10 class days after the date on which University classes begin.

Students who wish to maintain continuous year-round coverage may purchase coverage for the Summer period whether or not they are enrolled in Summer School. This should be done prior to the Spring commencement date. The five-week period between commencement and the start of Summer Session is not covered in any registration fees and coverage must be purchased separately before the end of Spring semester.

Claim forms and brochures explaining the coverage are available in the Office of University Insurance.

Refunds

A student who has registered and officially withdraws from the University prior to the tenth class day following the first day of regularly scheduled classes may receive a refund of all registration fees.

A student who changes from full-time to part-time status prior to the tenth class day following the first day of regularly scheduled classes shall receive a refund of all registration fees not applicable to part-time status. Graduate students registered for nine or more semester hours are required to pay the student insurance fee. Students may apply to the insurance office for a refund of this fee. A student receiving a refund of fees will not be eligible for activities and benefits covered by such fees.

For the first semester, the last day to withdraw with eligibility for refund is September 2, 1977. For the second semester, the last day for refunds is January 20, 1978. No refunds are authorized for withdrawal after those dates. The statement of the refund policy for University housing is a part of the housing contract.

Withdrawals made by mail should be addressed to the Office of Admissions and Records, 201 Hovey Hall, Normal, Illinois 61761.

A student whose course of study requires absence from campus for the entire term shall, upon proper application, receive refund of activity, general service, and health service fees. The application for such refund must be made

prior to the tenth class day following the first day of regularly scheduled classes.

Living Accommodations

Inquiries regarding housing should be addressed to the Office of Residential Life.

On Campus

The University operates both residence halls and family apartments. Full information and assistance in acquiring space in a residence hall suited to the individual student's particular life

style will be provided by the Residential Life Office staff.

Off Campus

Apartments and rooms are available in the Bloomington-Normal community. Room rent ranges from \$15.00 to \$30.00 per week. Apartment rental charges range from \$125.00 to \$300.00 per month. In a shared type arrangement apartment costs range from \$75.00 to \$90.00 per person. Listings of available accommodations in the community are maintained by the Office of Residential Life.

Assistantships, Scholarships, Financial Aids and Employment

Graduate Assistantships

Graduate assistantships are available in most of the departments of the University. In addition, assistantships are granted to men and women who serve as counselors in the University residence halls. In each instance, the graduate assistant is assigned responsibilities that contribute directly to the individual's professional career. Application for graduate assistantships should be made by the student to his departmental office.

The registration fees for a graduate assistant (other than tuition, which is waived) shall be the same as fees assessed any other graduate student, except that the \$16.50 insurance fee will be assessed every graduate assistant regardless of number of hours being taken.

Applications received after March 1, 1977 will be considered late and will be processed according to the availability of staff time and funds.

This application process will avail the graduate student applicant of consideration for a College Work-Study job, a National Direct Student Loan, and a very limited number of Regents' Tuition Waivers and University Scholarships. More detailed information may be obtained from the ISU Financial Aid Brochure.

State Military Scholarships

Veterans may avail themselves of the provisions of the State Military Scholarship Law, provided they have honorable discharges and were residents of the State of Illinois at the time they entered military service. These scholarships, which cover registration and activity fees for four years at the state-supported universities only, are administered through the ISU Financial Aids Office. Educational programs under a State Military Scholarship must be completed in a six-year period and a leave of absence must be requested if a scholarship is not used in consecutive semesters. Applicants must provide a non-returnable copy of DD-214, Report of Separation.

General Information

The process of applying for need-based financial aid requires the filing of an Illinois State University Application for Financial Aid and a Family Financial Statement (FFS). The preferential filing date for ISU aid applicants is March 1, 1977.

Loans

National Direct Student Loans

National Direct Student Loans are available from funds provided jointly by the federal government and the University. Graduate students may borrow up to \$2,500 per year not to exceed a total of \$10,000 during graduate work. These loans are based on demonstrated financial need as determined by the Financial Aid Office through the ISU Application for Financial Aid and completion of an ACT Family Financial Statement (FFS). No repayments are due and no interest accrues until nine months after the student leaves school. The interest rate then becomes three percent per year and the borrower has up to ten years to repay the loan. The minimum repayment is \$30.00 a month.

Illinois Guaranteed Loan Program

Loans are made available to students through the Illinois Guaranteed Loan Program, which is designed for the family with less actual financial need, but who desire to utilize credit to meet college expenses.

If the borrower and his/her family can qualify through federally prescribed formulas, the Federal Government will pay the interest that accrues on the loan while he/she is a student.

During the repayment period the annual percentage rate of interest is 7%, and all borrowers must pay this interest as it accrues.

Applications for this program can be initiated either at a local participating bank, savings and loan association, or credit union.

Employment

College Work-Study Program (CWSP)

This federally-sponsored program enables

those students with demonstrated need to earn a portion of their expenses while they are enrolled at Illinois State. The Federal Government pays 80% of the Work-Study student's earnings, while the employer pays the balance. A student employed 10-20 hours per week can usually expect to earn between \$750-\$1,750. Work-Study students may find jobs on campus (food service, library, union, department offices, etc.) or for non-profit off-campus agencies (hospitals, youth centers, counties, cities, elementary or secondary schools, etc.). Work-Study positions are posted on referral boards located outside the Financial Aid Office, Hovey 208. Students may then go directly to the employer for an interview and, if hired, must complete state and federal withholding tax forms in the Payroll Office, Hovey 101. Work-Study employers must also complete and return a Student Employment Form for all students hired.

As determined by federal regulations, students are not permitted to earn more than their Work-Study eligibility.

Regular (Non-Work-Study) Employment

Those students who desire to work on or off campus and who haven't been awarded a National Direct Student Loan (NDSL) or College Work-Study funds are eligible for any part-time employment positions on or off campus. Positions are posted on referral boards outside the Financial Aid Office, Hovey 208.

For Veterans - Federal Benefits

Veterans or dependents of veterans who believe that they may be eligible for benefits should contact the Financial Aid Office at Illinois State University prior to registration or in person soon after their arrival on campus.

Student Life and Services

University Handbook

The **University Handbook** provides information on selected University policies and regulations set up by student-faculty committees and by faculty and administrative agencies and officers, under the authority of the Board of Regents governing Illinois State University. The **Handbook**

also describes the structure and functions of the University and its agencies.

The students, faculty and staff of Illinois State University constitute an academic community. The University affirms the Guidelines for Individual Action and the General Regulations as enunciated in the **Handbook**. Each member of the community should—when appropriate

opportunities occur—reaffirm and communicate these statements, pointing out to those whose behavior is in violation that membership in this community implies adherence.

Cultural Opportunities

The University Union and Auditorium serves as the focal point for student activities, social and cultural programs sponsored by the University Programs & Activities Office, student organizations and community groups. Programs of aesthetic, dramatic, and musical nature are presented in this building. Musicians, dancers, lecturers, and stage personalities are presented annually by students, faculty, and off-campus persons.

The University Program Board brings to the campus each year programs which cover the spectrum of entertainment from classical to contemporary.

Civic organizations in Bloomington/Normal provide many musical and dramatic events.

Illinois Wesleyan University, located in Bloomington, presents additional cultural opportunities.

Placement Service

The University maintains an active program of placement for graduates and alumni and endeavors to keep constantly informed regarding the requirements of schools, businesses and governmental agencies.

The Placement Service makes a constant effort to follow up graduates in order to assist them in locating positions of responsibility commensurate with their experience and success in the field. All graduates who desire to secure professional and financial advancements should each year bring their credentials up to date in the Placement Service.

Research Services and Grants

The University's Office of Research Services and Grants is an information and coordinating center for faculty and students who wish to secure financial support from sponsoring agencies to conduct research projects, training programs and public service activities. Projects and programs funded by governmental agencies and Foundations constitute an important part of the

University's involvement in research and development activities. This office serves as a catalyst to stimulate faculty and student interest in research projects, teaching experiments and community service programs. It provides help in locating appropriate funding sources for new academic endeavors; assists in development of research proposals; and acts as liaison between the University and funding agencies.

Alumni Services

Through the Alumni Office, the Alumni Association and Alumni Clubs, former students maintain contacts with one another and the University. The Alumni Office, which is located in Rambo House, keeps records on file for more than 44,000 alumni and serves as their headquarters when they are on campus.

The **Alumni News** is distributed quarterly to all alumni by the association. The association plans class reunions, hospitality rooms at conventions, alumni meetings throughout the state, an alumni travel program, the annual alumni luncheons at Commencement and Homecoming, and other Homecoming activities. Recent projects of the Alumni Association include the ISU Alumni Sports Hall of Fame, increase in Alumni-Foundation scholarships, and the Distinguished Alumni Awards.

In addition to the alumni club activities in Illinois, meetings are held in Florida, California, Arizona, and on the East Coast in the Philadelphia and Washington, D.C. areas.

University Foundation and Development Office

The Illinois State University Foundation is a not-for-profit corporation chartered by the State of Illinois for the sole purpose of serving Illinois State University. It does so by inviting, receiving, holding and administering gifts, grants and loans to support and enhance the regular activities of the University. Because the University achieves its greatest efficiency when its resources are assigned where their marginal yield is highest, the Foundation's first interest is to attract funds the uses of which are free of restriction. Nevertheless, the Foundation encourages prospective donors or contributors to exercise the right to specify the use to be made of their funds provided the overall interest of the University is served thereby. Alumni and other

friends of the University who seek further information about the purpose of the Foundation, or ways in which they may make contributions to the Foundation, should confer with a representative of the Foundation or Development Office.

The Development Office is responsible for creating and carrying out a long-range program for expanding the amount of voluntary financial and other support for the University. Such voluntary support is used to provide scholarships, student loads, research grants, equipment, and special purpose academic projects.

Because the University must use State funds primarily for additional classrooms and laboratories and for salaries, the support which the Office of Development can generate provides the Margin of Excellence which enables ISU to continue to be a creative and progressive force in higher education. The Development Office, in actively seeking voluntary support for the University, is carrying on the tradition established by the University's founders, whose solicitation of gifts of money and land made the establishment of the University possible.

Fields of Study and Degrees Granted

Accounting	M.S.
Agriculture	see page 31
Art	M.A., M.S. in Ed., M.F.A., Ed. D.
Biological Sciences	M.S., M.S. in Ed., Ph.D.
Business Administration	M.B.A.
Business Education	M.A., M.S., M.S. in Ed.
Chemistry	M.S., M.S. in Ed.
Counselor Education	M.A., M.S., M.S. in Ed.
Economics	M.A., M.S., D.A.
Educational Administration	M.A., M.S., M.S. in Ed.
	Spec. in Ed., Ed.D., Ph.D.
Elementary Education	M.A., M.S., M.S. in Ed.
English	M.A., M.S., M.S. in Ed., D.A.
French	M.A.
Geography	M.A., M.S., M.S. in Ed.
Health and Physical Education	M.A., M.S., M.S. in Ed.
History	M.A., M.S., M.S. in Ed., D.A.
Home Economics	M.A., M.S., M.S. in Ed.
Industrial Technology	M.A., M.S., M.S. in Ed.
Instructional Media	M.S., M.S. in Ed.
Mathematics	M.A., M.S., M.S. in Ed., D.A.
Music	M.A., M.S., M.M., M.M. Ed.
Political Science	M.A., M.S.
Psychology	M.A., M.S.
Reading	M.S. in Ed.
School Psychology	M.A., M.S., M.S. in Ed.
Secondary Education	M.S. in Ed.
Sociology	M.A., M.S.
Spanish	M.A., M.S. in Ed.
Special Education	M.A., M.S., M.S. in Ed.
Speech Communication	M.A., M.S., M.S. in Ed.
Speech Pathology and Audiology	M.A., M.S., M.S. in Ed.
Supervision	M.A., M.S., M.S. in Ed.
Theatre	M.A., M.S., M.S. in Ed., M.F.A.
Western European Studies	M.A.

Masters' Degrees

Credit Requirements

Masters' degrees are offered in the fields indicated above. The minimum credit requirement for the masters' degree is 32 semester hours. A student may elect one of three alternate plans for the degree or meet specific departmental requirements listed under the departmental listing. One may elect to do a thesis for

which the student may receive from four to six hours of credit in Masters' Thesis 499, elect to do 32 hours of course work and take a comprehensive examination, or in the departments of Curriculum and Instruction, Educational Administration, Industrial Technology, Home Economics and Mathematics, a 39-hour program which does not require a thesis or comprehensive is an option. The student may not present credits in Masters'

Thesis 499 toward the degree unless his/her thesis is completed and approved for deposit in the Graduate School Office.

In the arts and science master's programs, including those for college and secondary teaching, a student must present, exclusive of Masters Thesis 499, at least 12 of the 32 hours in courses numbered at the 400 level, eight hours of which must be in his/her major field. A total of at least 16 semester hours of work must be in the major field (counting courses at the "300" level or above). Remaining credits may be in such related fields as the student's adviser recommends, with the exception that in the teaching programs certain courses in education and psychology are specified.

A student should check carefully with the adviser the departmental requirements for masters' degrees, since the above regulations indicate only minimums set by the Graduate School.

General Degree Requirements

Degrees offered are listed with each department's offerings. Students should note any special requirements in their respective fields.

Master of Arts

The Master of Arts degree is awarded to a student who has completed an appropriate program, as designated in this catalog, provided the following requirements are met: The student must have earned credit for a minimum of two years of a foreign language at the college level, or must demonstrate a reading knowledge of a foreign language. In some departments this must be French or German (see departmental regulations). The student also must have earned a minimum of 32 semester hours of credit in the humanities and social sciences in addition to work in foreign language. These requirements in foreign language, humanities, and social sciences may be met by satisfactory work at either the graduate or undergraduate level.

Master of Business Administration

Requirements for this degree are listed in the section devoted to the Business Administration Department.

Master of Science

The Master of Science degree is awarded to students who complete requirements for the degree as designated in the departmental offerings in this catalog.

Master of Science in Education

The Master of Science in Education degree may be awarded to students who have met the requirements of one of the graduate programs in professional education in the University.

Master of Music and Master of Music Education

Requirements for these degrees are listed in the section devoted to the Music Department.

Master of Fine Arts (Art and Theatre)

Requirements for these degrees are listed on pages 21 and 22.

College Teaching Program Requirements

This program is designed for students desiring an internship experience and a basic seminar concerning the nature of college teaching. Students should register for Internship in College Teaching 491 and Studies in College Teaching 474.

Students planning to teach in junior colleges requiring certification may need to take work beyond the 32 hours required for the degree. They should obtain information as to the certification rules of the state in which they desire to teach in order to include the necessary courses in their programs. The Department of Educational Administration offers several courses concerned with the junior or community college.

Secondary Teaching Program

This master's program for secondary teachers assumes that the student will have completed undergraduate work for certification, and it is designed to provide a master's degree in the student's discipline, with appropriate professional electives. Students needing to meet certification requirements should plan to take

such additional courses in education or psychology as will satisfy certification requirements in the states in which they desire to teach.

A student in the master's degree program for secondary teaching must take Curriculum and Instruction 497, Introduction to Research, or an approved alternate course offered by the student's own department. In addition six hours must be selected from the following courses:

Measurement and Evaluation in:

Education 387 (3)

Curriculum Theory 476 (3)

A graduate course in historical, social, or philosophical foundations of education

Principles of Guidance 360 (3)

Independent Study in Curriculum and Instruction 400 (1-4)

Advanced Educational Psychology 416 (3)

The remainder of the course work is taken in the student's major department. Students should note requirements listed with departmental offerings in this catalog and should consult advisers concerning their programs.

For an option to the above program in Secondary Teaching, refer to the Curriculum and Instruction Department. Application for National Council for Accreditation of Teacher Education approval is being made. Other courses may be taken through prior approval of the major adviser.

Transfer and Extension Credit

On approval of the Dean of the Graduate School, a student holding a bachelor's degree from this University may present a maximum of eight semester hours of graduate credit from another college or university for use in meeting the requirements of the master's degree. A student who holds a bachelor's degree from another college or university may present a maximum of six semester hours of graduate credit earned at another college or university. An exception to this would relate to students who, under certain circumstances, would be allowed to present up to half the semester hours necessary for meeting the requirements of the master's degree from certain colleges or universities approved by the Dean of the Graduate School. The request must have the prior approval of the department in which the student wishes to enroll. A departmental evaluation of all courses presented will be necessary prior to the approval of the Graduate Dean. A student who plans to take courses elsewhere is advised to have such work approved in advance to make sure that the courses are appropriate for the student's curriculum at Illinois State University.

Not more than six semester hours of graduate extension work from universities other than Illinois State University may be applied toward the master's degree. **For courses offered by Illinois State University, no differentiation is made between credits earned on campus and off campus, beginning with the Second Semester 1973-74.** Correspondence courses are not accepted toward a master's degree. Forms for requesting transfer of credit may be obtained in the Graduate Office, Hovey Hall.

Residence Requirements

Except in the departments of Art, Foreign Languages, and Speech Pathology-Audiology, a candidate for a master's degree is not required to complete a residence requirement. For specific requirements of the above departments refer to the department program description.

Time Limits

All graduate credit used in meeting requirements for the degree must be earned within a period of six years.

Academic Advisers

Each student has an academic adviser to assist in planning the student's work. This adviser should be consulted regarding the sequence of courses, the selection of electives, and the option of thesis, comprehensive examination, or 39 hour option.

If a student follows a curriculum of specialization in a subject-matter field, the chairperson of the department concerned is the academic adviser unless another faculty member has been appointed by the chairperson. This plan applies to all secondary and college teaching curricula,

also elementary education with departmental specialization. In other curricula, other academic advisers have been appointed.

An advisory committee is appointed for each student who writes a thesis. This committee is responsible for directing the thesis project, recommending the student for admission to candidacy for the degree and conducting the final examination.

If the student chooses the option of a comprehensive examination, the academic adviser has the responsibility of recommending the individual for admission to candidacy and conducting the final examination.

Program Approval Required

At registration, each student's program should carry the approval of the academic adviser. If a program does not have such approval there is no assurance that the courses can be used in meeting the requirements for the degree.

Admission to Candidacy

To be admitted to candidacy for the master's degree the student must file a Plan of Study with the Dean of the Graduate School. This is done on forms obtained in the departmental office. At the time of filing all deficiencies must be removed and the candidate must meet the requirements of the University regarding scholarship. Normally the student applies for admission to candidacy when approximately half of the work toward the master's degree has been completed and must do so before the beginning of the semester or summer session in which the candidate expects to receive the degree. The Plan of Study must indicate whether the student has selected the comprehensive examination, thesis option, or the 39 hour option. If the student is offering a thesis as part of the work for the degree, the thesis proposal (see below) must have been filed with the Dean of the Graduate School.

Thesis

The student electing the thesis option must register for from four to six hours of 499, Master's Thesis, as approved by the adviser. To register

for 499 the student must actually be working on the subject under the direction of the adviser or thesis chairperson. No grade will be given for the course but credit will be entered on the student's record at the time the approved thesis is deposited in the Graduate School Office. No credit for 499 may be offered for the master's degree by a student who does not complete a thesis.

A thesis is written under the direction of an advisory committee appointed by the department chairperson. A student must be admitted to a degree program in the Graduate School before a thesis committee can be appointed.

The title, scope and design of each proposed thesis must be approved by the student's advisory committee and the department chairperson. This approval must be received before a student may apply for admission to candidacy. In order to allow time for review, the student is required to file an approved **Proposal for Research** with the Dean of the Graduate School early in the semester preceding the one in which completion of the master's degree is expected. Forms for submitting the proposals are available in the Graduate Office.

There is no assumption of uniformity in thesis research. For example, a student may propose a creative project in art or music. In each instance, however, the completed project must meet approved standards of scholarship in the chosen field of study. In each instance there must be evidence of ability to think logically, to gather and organize material, to draw and defend conclusions and to present the results of the foregoing procedures in a creditable manner.

Thesis Consultant

A thesis consultant approves all theses for the Graduate School before they are officially accepted. The student is urged to consult the thesis consultant of the Graduate School as soon as a preliminary draft of the first part of the thesis has been completed and has received approval of the thesis committee. At this time the thesis consultant will counsel the student regarding problems such as those related to format, footnotes, illustrations and the use of language.

Before a thesis is deposited in the Graduate School Office, it is the responsibility of the thesis consultant of the Graduate School to examine the materials and to make sure that the report is neatly and correctly typed; is free of technical errors in format, footnoting, and bibliography; suitable for binding, and reflects credit upon the University and its graduate program. If the

form of the thesis is not thus approved, the student must make whatever corrections are necessary and submit the materials again.

A descriptive note or annotation of not more than thirty words and an abstract of not more than three hundred words must be approved by the advisory committee and must accompany the thesis when it is filed in the Graduate School Office.

After approval by committee members and the thesis consultant for the Graduate School, the student must file two unbound examination (carbon) copies of the thesis in the departmental office at least one week (seven days) before taking the oral examination. It is the student's responsibility to retrieve these examination copies shortly before the oral examination. The adviser has the responsibility of notifying members of the department and the Graduate School Office that the copies have been made available for examination and the time and place of the oral examination.

Following the examination the student must

file the original copy and the second copy of the approved thesis, with any corrections suggested by the orals committee, unbound, in the Graduate School Office. To be eligible for graduation a student must deposit the thesis in the Graduate School Office at least 10 days before the end of the semester. Theses filed after that date will be credited toward graduation the following semester or session.

Examinations

An examination, oral, written, or both, must be taken by each student before receiving the master's degree. This examination covers the graduate work which the student is presenting for the degree. The time, place and nature of the examination is determined by the student's advisory committee if the student selects the thesis option. The comprehensive examination is the responsibility of the department.

Master of Fine Arts

Department of Art

Program Requirements

ADMISSION

All regular criteria for admission to a terminal degree program in the Graduate School of the University will apply with the exception of the GRE requirement.

In the Department of Art the graduate student must be accepted by the Art Department. This will require the submission of a portfolio of the student's work, an example of scholarly writing and three letters of recommendation. This material will be reviewed by the members of the studio faculty in the student's intended area of concentration. After final admission evaluations have been complete, Admissions and Records will notify the student of admission to the Master of Fine Arts Program.

ACADEMIC ADVISERS

The pre-candidacy MFA student selects a major adviser with the help of the Director of Graduate Studies. After the student is admitted to candidacy, the Chairperson of the Department, in consultation with the student and the student's major adviser, will select a graduate committee of a least three members. The chair-

person of this committee must be from the student's major area of study. Members of this committee are appointed by the Graduate School following a joint recommendation of the student and chairperson of the student's graduate committee. This committee will review the student's graduate show and conduct and evaluate the student's written and/or oral comprehensive examination.

CURRICULUM REQUIREMENTS

A minimum of 60 semester hours of graduate work beyond the bachelor's degree is required for the MFA in Art. For a detailed explanation of this requirement see information under departmental heading.

TRANSFER AND RESIDENCE

Students who hold no earned Master's Degree can transfer no more than nine hours into this program. Completed Master of Arts and Master of Science degrees may be evaluated for transfer. Such evaluation will be based upon both the student's portfolio and academic record. However, this evaluation will not be made until the student has completed a minimum of six semester hours in the student's major studio area at Illinois State University. The student must complete 32 semester hours at Illinois State University and meet the residence requirements.

After receiving the bachelor's degree, a student seeking the Master of Fine Arts degree must complete at this University the equivalent of at least four semesters with at least two of them being full time, consecutive semesters. Summer sessions may not be counted toward the two consecutive semester requirement.

TIME LIMITATIONS

All work for the Master of Fine Arts degree must be completed within six calendar years after the student begins study toward the degree. If the student does not complete the work within this time, additional examinations, or additional course work, or both, may be required in order to continue in the Master of Fine Arts Program.

ADMISSION TO CANDIDACY

To be admitted to candidacy, the student must present a grade average of B or better with no more than 5 hours of C, and a plan of study must be on file with the Dean of the Graduate School. The student may be admitted to candidacy after completing 24 hours of graduate study at Illinois State University or after two semesters of resident study.

The student will present a portfolio and any additional requested material to a review committee for evaluation. The student's committee will consist of the student's major adviser, the Director of Graduate Studies in Art and at least two other faculty members with whom the student has worked or who have special interests or competencies in the student's area of study.

Committee will prescribe courses or other experiences to remove the deficiencies. A student may reapply for admission only once.

ACADEMIC ADVISERS

After the student is admitted to the MFA program, the chairperson of the department in consultation with the student and with faculty whom the chairperson deems appropriate, will select the candidate's Portfolio Committee. The committee chairperson must come from the student's major field.

CURRICULUM REQUIREMENTS

A minimum of 60 semester hours of graduate work beyond the bachelor's degree is required for the MFA in Theatre. For a detailed explanation of this requirement see information under departmental heading.

TRANSFER AND RESIDENCE

Students who hold no earned Master's Degree can transfer no more than six semester hours of credit into this program. Completed M.S. or M.A. degrees may be evaluated for transfer after the student has completed eight semester hours at Illinois State University. A minimum of 32 hours must be taken at Illinois State University.

The candidate must spend at least two consecutive full terms in residence. A full term may be interpreted as one semester, with a class load of 8-15 hours, or a summer session with a class load of 6-8 hours.

TIME LIMITATIONS

All work for the Master of Fine Arts degree must be completed within six calendar years after the student begins study toward the degree. If the student does not complete the work within this time, additional examinations or additional course work, or both, may be required in order to continue in the Master of Fine Arts Program.

ADMISSION TO CANDIDACY

After admission to the MFA program the student must apply for admission to candidacy. To be admitted to candidacy, the student must present a grade average of B or above with not more than six hours of C. The student may be admitted to candidacy after completing 24 hours of graduate credit in Theatre at Illinois State University, or two semesters of full-time resident study. A plan of study must be on file with the Dean of the Graduate School. A review of the student's admission to candidacy will be conducted by the graduate faculty of the Department.

Department of Theatre

Program Requirements

ADMISSION

All regular criteria for admission to a terminal degree program in the Graduate School of the University and for graduate study in Theatre will apply with the exception of the GRE requirement.

Graduate students who hold no master's degree will be admitted to the MFA program only after completing 12 graduate hours in theatre courses at ISU or upon recommendation of the department's graduate faculty. After completing 12 hours, the student will be permitted to audition by portfolio and performance. The audition will be evaluated by the graduate faculty. A written evaluation of the candidate will be presented to the department chairperson. If not recommended for admission, the student will receive an evaluation of deficiencies; the Evaluation

QUALIFYING EXAMINATION

A qualifying examination is required prior to admission to candidacy. It may be comprehensive to the extent that it examines the candidate's knowledge of the discipline of theatre; it may include graduate work the student is presenting

for the degree, and it may include demonstration of proficiency. The examination will be conducted by the graduate faculty of the Department. The student may request that other faculty members with whom he or she has taken course work participate in the qualifying examination.

Specialist in Education

Program Requirements

ADMISSION

A student seeking admission to a program leading to the Specialist in Education degree must present letters of recommendation and must take qualifying examinations before being admitted to the program. The student may be required to come to the campus for an interview.

Admission of an applicant to a specialist degree program will take account of personal and professional qualifications as well as scholastic records and measurement of academic ability. Admission involves approval by the department as well as the Graduate School.

While the specialist program is a complete program and is usually terminal, a person completing a specialist degree is not precluded from entering a doctoral program. The student should not expect to be able to transfer all specialist course work to a doctoral program, however, since some work appropriate to the one degree will probably not be appropriate to the other. Similarly a doctoral candidate may not expect to abandon the program and accept a specialist degree as compensation for a partially fulfilled program.

ACADEMIC ADVISERS

The chairperson of the department with the approval of the Dean of the Graduate School, appoints an academic adviser for each student admitted to a specialist degree program. If the student is pursuing a minor field of study, as well as a major field, the adviser, in approving the student's program, should obtain the advice of the department representing the student's minor field. At the time of each registration, the academic adviser files copies of the student's program with the heads of departments concerned.

CURRICULUM

A student selecting the specialist degree must select a major field of study, and a supporting program approved by the academic adviser, the Dean of the Graduate School, and the department directly involved.

TRANSFER AND RESIDENCE

A student seeking the specialist degree may petition to transfer, from another institution, not more than six semester hours of graduate credit beyond the master's degree. The Dean of the Graduate School must approve all transfer credit used in meeting the requirements for the specialist degree.

A student seeking the specialist degree must, after receiving a master's degree, complete at this University the equivalent of at least one academic year of graduate work. This must include one semester in which the student is in residence; or one summer in which the student is in residence for eight consecutive weeks. A student is considered to be in residence when the student devotes a major part of the time to graduate study and research on the campus.

A student will not be considered in residence while employed full time.

With departmental approval not more than six semester hours of graduate extension work from universities other than Illinois State University may be applied to the specialist degree. **For courses offered by Illinois State University, no differentiation is made between credit earned on campus and off campus, beginning with the Second Semester 1973-1974.** Such courses or seminars offered off campus must be taught by full or associate members of the Graduate Faculty of this university, with the exception of the Cooperative Specialist degree program with Sangamon State University (see Educational Administration), the above requirements apply.

TIME LIMITATIONS

The specialist degree is not granted on the basis of a student having successfully completed a certain number of courses, but upon evidence of scholarly attainment as demonstrated especially by examinations and competence in research.

Although course credit is not the primary basis for granting the specialist degree, a student is not eligible to take the final examination until the latter part of the session in which

thirty semester hours of work beyond the master's degree is completed. More than two semesters may be necessary to complete all requirements for the degree.

All work for the specialist degree must be completed within six calendar years after the student begins work beyond the master's level. If the student does not complete the work within this time, the student may be required to take additional examinations, or additional course work, or both, in order to continue in the specialist program.

ADMISSION TO CANDIDACY

A student seeking the specialist degree may be admitted to candidacy after (a) removal of any deficiencies assessed at admission, (b) approval of a proposal for research, and (c) approval by the academic adviser of a plan of study leading to the specialist degree.

RESEARCH

A student seeking the specialist degree is

required to complete a research project that gives evidence of scholarly attainment and capacity for the independent investigation appropriate to the degree.

The Dean of the Graduate School appoints the student's research committee which includes the academic adviser. The topic and research design must be approved by the Dean of the Graduate School and the department representing the student's major field. The entire committee shares the responsibility for the research project although the academic adviser may work more directly with the student.

FINAL EXAMINATION

The Dean of the Graduate School appoints a committee which is responsible for the final examination. This examination may be oral, written, or both. The committee includes the student's academic adviser, as well as other members of the graduate faculty.

Doctor of Arts

Program Requirements

ADMISSION

All regular criteria for admission to a terminal degree program in the Graduate School of the University will apply. A student seeking admission to a doctoral degree program must present letters of recommendation and must take qualifying examinations before being admitted to the program. Admission to the program ordinarily requires at least previous successful teaching experience and a level of training equivalent to a master's degree in the discipline they wish to enter. Candidates for admission who do not meet departmental requirements will be considered on an individual basis and may require a personal interview.

Admission involves approval by the department as well as the Graduate School.

ACADEMIC ADVISER

The chairperson, with the approval of the Dean of the Graduate School, appoints an academic adviser for each student admitted to a doctoral program. The adviser is responsible for approving the student's program of courses with the advice of departments representing, when applicable, both major and minor fields. Normally this function is assumed by the chairperson of the student's dissertation committee after the committee has been named. At the time

of each registration, the academic adviser files copies of the student's program with the department chairpersons concerned and with the Dean of the Graduate School.

REQUIRED COURSES AND FIELDS

A doctoral student may select both a major and a cognate field (or fields) of study. The selection of cognate field (or fields) must have the approval of the Dean of the Graduate School and the department directly involved. A cognate field may, under certain circumstances, be in the same department as a major field.

RESIDENCE

A Doctor of Arts student, after completing work for a master's degree, or its equivalent must complete at least one semester of full time residency. The normal residence requirement is one year; but commuter students who make continuing progress in the program may have the residence requirement reduced to one semester. Continuing progress for a commuter student is defined as taking one course each semester and a full load each summer session.

A student will not be considered in residence while employed full-time.

With departmental approval not more than six semester hours graduate extension work offered by universities other than Illinois State University may be applied to the doctoral degree.

For courses offered by Illinois State University, no differentiation is made between credits earned on campus and off campus, beginning with the Second Semester 1973-1974. Such courses or seminars offered off campus must be taught by full or associate members of the Graduate Faculty of this university.

TIME LIMITATIONS

The Doctor of Arts degree is not granted on the basis of a student having successfully completed a certain number of courses, but after the candidate has demonstrated the required competency in the field.

All work for the Doctor of Arts degree, including the dissertation must be completed within seven calendar years after the student is admitted to a Doctor of Arts program.

PRELIMINARY EXAMINATIONS AND ADMISSION TO CANDIDACY

A doctoral student may be admitted to candidacy after: (a) passing a comprehensive preliminary examination, (b) a plan of study is submitted to the Graduate Dean and approved, and (c) receiving approval of the dissertation topic by the dissertation committee and the Dean of the Graduate School. The preliminary examination which may be written, oral, or oral and written will cover both major and minor fields. It will be concerned with (1) the student's professional competence in Higher Education and (2) assessment of the student's ability to apply his/her knowledge to problems of teaching and curriculum development in his/her area.

The Dean of the Graduate School appoints the examining committee which includes the student's academic adviser and a representative of the minor field (or fields).

DISSERTATION FOR THE D.A.

Each candidate will be expected to complete

a dissertation which is original and either (1) has relevance to the profession of college teaching, or (2) is an applied research topic which demonstrates a combination of scholarly, analytical, creative, and expository skills. The dissertation for the D.A. may involve the application of existing knowledge or theory to a practical educational problem or situation.

The Dean of the Graduate School appoints a dissertation committee of not less than five (5) members, one of whom shall be the member outside the department and represents the graduate faculty, the chairperson will act as the student's academic adviser. The topic of the dissertation must be approved by the committee and Dean of the Graduate School.

The student is not required to have the dissertation printed but will be required to pay the expense of microfilming for distribution by University Microfilms. The University may publish part or all of the dissertation.

REGISTRATION FOR DISSERTATION WORK

A candidate for the doctorate who has completed course work must register for Dissertation 590 recommended by the department during the semester or summer session in which the final oral examination is taken, and in any semester or summer session in which the student holds an assistantship or fellowship, or in which the student wishes to use University facilities.

FINAL EXAMINATION

This examination may be oral, written, or both, and may be concerned with more than the dissertation topic. The result of the examination will be determined by the dissertation committee but any member of the graduate faculty may attend.

Doctor of Philosophy and Doctor of Education

Program Requirements

ADMISSION

A student seeking admission to a doctoral degree program must present letters of recommendation and must take qualifying examinations before being admitted to the program. The

student may be required to come to the campus for an interview.

Admission of an applicant to a doctoral program will take account of personal and professional qualifications as well as scholastic records and measurement of academic ability.

Admission involves approval by the department as well as the Graduate School.

ACADEMIC ADVISER

The chairperson, with the approval of the Dean of the Graduate School, appoints an academic adviser for each student admitted to a doctoral program. The adviser is responsible for approving the student's program of courses with the advice of departments representing, when applicable, both major and minor fields. Normally this function is assumed by the chairperson of the student's dissertation committee after that committee has been named. At the time of each registration, the academic adviser files copies of the student's program with the department chairpersons concerned and with the Dean of the Graduate School.

REQUIRED COURSES AND FIELDS

A doctoral student may select both a major and a minor field (or fields) of study. The selection of minor field (or fields) must have the approval of the Dean of the Graduate School and the department directly involved. A minor field may, under certain circumstances, be in the same department as a major field.

RESIDENCE

A doctoral student (Ph.D., Ed.D.), after completing work for a master's degree or its equivalent, must be enrolled for a least two terms in residency in a 12-month period. A term is defined as an 18-week semester or an 8-week summer session. Residency is defined as successful completion of at least 9 semester hours of course work in an 18-week semester and 6 hours in the 8-week session.

Each student will file a declaration of residency for approval of the Department Chairperson and Graduate Dean prior to entering into residency and shall ask the Chairperson to verify the completion of the residency. The declaration shall specify: (1) the nature and extent of employment; (2) how the student will become involved in the professional activities of the department; and (3) accessibility of libraries, laboratories and research tools necessary for doctoral level study in the respective discipline. Any exceptions to the above requirements must have the approval of the Department Chairperson and the Graduate Dean.

A student will not be considered in residence while employed full-time.

With departmental approval not more than six semester hours graduate extension work offered by universities other than Illinois State University may be applied to the doctoral degree.

For courses offered by Illinois State University, no differentiation is made between credits earned on campus and off campus, beginning with the Second Semester 1973-1974. Such courses or seminars offered off campus must be taught by regular or associate members of the Graduate Faculty of this university.

TIME LIMITATIONS

The doctoral degree is not granted on the basis of a student having successfully completed a certain number of courses, but upon evidence of scholarly attainment as demonstrated especially by examinations and competence in research.

All work for the doctorate, including the dissertation, must be completed within eight calendar years after the student begins work beyond the master's level. If the student does not complete the work during this time, the student may be required to take additional qualifying examinations, or additional course work, or both, in order to continue in the doctoral program.

LANGUAGE REQUIREMENTS FOR THE Ph.D.

All candidates for the Ph.D. must meet appropriate standards in oral and written English. In addition, the general requirement for the degree is a reading knowledge of two foreign languages chosen from French, German, Russian or other approved languages. In some fields the native language of a foreign graduate student may be offered in fulfillment of a foreign language requirement.

In all cases the department involved shall furnish evidence of its approval of a student's choice of language as containing a substantial body of knowledge pertinent to the field of inquiry and may furnish evidence that the candidate has proficiency in that language.

By petition, the student may substitute a more advanced knowledge of one language for a reading knowledge of two. In either case the Department of Foreign Languages has the responsibility of certifying that the language requirement has been met. A reading examination is given from an article or book in the candidate's field. The use of a dictionary is permitted. Advanced knowledge of a single foreign language is demonstrated by skills sufficient to give and to comprehend lectures in the field of specialization, to respond to questions relating to the specialization as well as to read the language without the aid of a dictionary. Language examinations are given according to a schedule published in the annual calendar.

The Graduate School permits the substitution

of other research tools or competencies for one of the two foreign language requirements, where such substitutions are particularly appropriate to the field involved. Departmental alternatives are described with departmental offerings in this catalog.

RESEARCH TOOLS FOR THE Ed.D.

Ed.D. candidates who are not required to offer foreign languages as research tools are expected to have developed other competencies appropriate for doctoral candidates in their fields. These may involve proficiencies in such areas as statistics, measurement and evaluation, research techniques and experience in field survey work or special course work.

As in the case with ability to use a foreign language, some research skills may be the product of undergraduate and early graduate work. The concern of the Graduate School is that the doctoral candidates be able to understand the research work of leading scholars in their fields, that they master the processes which enable them to do productive research themselves, and that they be able to report the research findings clearly to others.

PRELIMINARY EXAMINATIONS AND ADMISSION TO CANDIDACY

A doctoral student may be admitted to candidacy after: (a) meeting the foreign language requirement or alternate approved program, (b) passing a comprehensive preliminary examination, and (c) receiving approval of the dissertation topic.

The comprehensive preliminary examination is written, or, written and oral. It covers both major and minor fields. It also is concerned with the student's professional competence and ability to undertake independent research.

The Dean of the Graduate School appoints the examining committee which includes the student's academic adviser and a representative of the minor field (or fields).

DISSERTATION FOR THE Ph.D. and Ed.D.

The doctoral candidate is encouraged to select a dissertation topic early in the work and to plan course work with the advice of the dissertation committee. The Dean of the Graduate School appoints a dissertation committee of not less than three members, the chairperson of which acts as the student's academic adviser. The topic of the dissertation must be approved by the Dean of the Graduate School as well as this committee. The entire committee shares responsibility for the dissertation although the chairperson may work more directly with the student.

The dissertation for the Ph.D. must involve independent research and an original contribution to knowledge. While the dissertation for the Ed.D. may meet the above requirements, it is customary to allow greater flexibility for the Ed.D. dissertation, so that it may, for instance, involve the application of existing knowledge or theory to a practical educational problem or situation.

The dissertation must be approved by the dissertation committee, as well as the final examination committee appointed by the Dean of the Graduate School. This committee represents the University at large.

The student is not required to have the dissertation printed but will be required to pay the expense of microfilming for distribution by University Microfilms. The University may publish part or all of the dissertation.

REGISTRATION FOR DISSERTATION WORK

A candidate for the doctorate who has completed course work must register for Research 590 or a similar course recommended by the department during the semester or summer session in which the final oral examination is taken and in any semester or summer session in which the student holds an assistantship or fellowship, or in which the student wishes to use University facilities.

FINAL EXAMINATION

The Dean of the Graduate School appoints a committee which is responsible for the final examination. This examination may be oral, written, or both, and is concerned with more than the dissertation topic. The committee includes the student's academic adviser, as well as other members of the graduate faculty.

Academic Procedures and Regulations

Grading System, Scholarship and Other Requirements

Passing grades in the Graduate School are A, B and C, which represent grade points of 4, 3 and 2, respectively, in figuring grade point averages. Courses completed at this University with grades below C may not count toward a degree, but these grades C, D and F are counted in computing the average. If a graduate student repeats a course, both grades are counted in computing the average.

A student must have at least a B average in work done at this University in order to be admitted to candidacy for a degree. For graduation a B average is also required. The Dean, in consultation with the student's adviser, may ask a student whose work is unsatisfactory to discontinue graduate work or grant a probationary period in which to bring work up to required standards. A student who fails to bring the total record up to a B average during the probationary period will not be permitted to register for further graduate work.

It is the student's responsibility to make a formal request for the transfer of any credit which the student proposes to use in meeting requirements at this University. Transfer credit must carry a grade of B or better.

The last course or courses before graduation must be completed with this University.

The Council may deny admission to the University, or registration at any time or admission to candidacy for the degree, upon the basis of unsatisfactory scholarship, or what in their judgment is unfitness for teaching on physical, moral, mental or emotional grounds.

Withdrawals

WITHDRAWALS FROM COURSES — LESS THAN ALL COURSES

A student may officially withdraw from a course any time prior to the end of the fourteenth week of a semester course, prior to the end of the sixth week of an eight week course (as summer session and block-of-time courses), and prior

to an approximate proportionate time in a pre-session and other short courses. A student should consult the Class Schedule booklet and the Summer Session Catalog for specific final withdrawal dates for a given term. Upon the written recommendation of a physician, a student for medical reasons may be granted permission to officially withdraw from a course at a later time than the final date specified.

After the period during which program changes are made, a student must meet with the instructor of any course from which the student is planning to withdraw. This conference must be held prior to the granting of official permission to withdraw from a course. At this time a WX, WP, or WF will be assigned. WX is given if the student withdraws before the quality of work can be determined; WP, if the student is passing at the time of withdrawal; and WF, if failing. A withdrawal grade of WF shall not be computed in the student's grade point average.

A grade of F will be given to students who do not officially withdraw by having a withdrawal slip signed by the instructor and placed on file in the Registration Office before the specified final withdrawal date, and to students who register for a course but do not complete course requirements. In exceptional cases deviations may be granted by the Dean of the Graduate School. In the case of graduate students, the F will count toward the graduate student's grade point average.

WITHDRAWAL FROM THE UNIVERSITY — ALL COURSES

If a student withdraws from the University, all grades will be assigned in the same manner and under the same provisions stated above except that the student is not required to contact his or her instructors. Instead, the instructor of each course would assign a WP, WF, or WX as appropriate. If medical or similar substantial reasons make it impossible for the student to follow the usual procedures, a letter signed by the student explaining the situation and requesting withdrawal from the University will be sufficient. Whether in person or by mail, the withdrawal is processed in the Office of Admissions and Records.

Regardless of the circumstances of withdrawal, the student shall be responsible for returning

any laboratory equipment and library materials. The student shall pay any parking fines and remove the parking decal from any registered vehicle. The student shall contact the Office of Residential Life to obtain clearance from room and board obligations and to arrange for vacating the residence hall room. The student shall arrange with the Financial Aids Office to place any scholarship on leave or cancel it and arrange a payment plan for any loans.

A grade of F will be given to students who do not officially withdraw with the Office of Admissions and Records before the specified final withdrawal date, and to students who register for a course but do not complete course requirements. In exceptional cases, deviations may be granted by the Dean of the Graduate School. In the case of graduate students, the F will count toward the graduate student's grade point average.

Religious Observances

The University will reasonably accommodate its students, faculty and staff who are unable to fulfill their regular duties on the occasion of a religious observance. Faculty and staff should observe normal procedures for absence from their duties. Students who are unable to attend class or take examinations for religious reasons will be given information needed to make up classes and work which were missed or to take the examination on an alternate, acceptable day.

Incompletes and Deferred Grades

An I (incomplete) will be given a student who is doing passing work but who, because of illness or other justifiable reasons, finds it impossible to complete the work by the end of the semester or session. The student must be in class to within three weeks of the close of the semester or one week of the summer session and the quality of the work must be such that the student can complete it through special assignments and examinations. Incompletes should be cleared during the next semester or session a student is in school and must be cleared before one year has elapsed. A deferred grade (De) is always given in research courses leading to a thesis or dissertation.

A student expecting to graduate at the end of any semester or session should be sure to

have incompletes cleared in the Office of Admissions and Records at least three weeks before the end of the semester in order to give adequate time for the records to be cleared for graduation.

Academic Load

Twelve hours is the usual load for the graduate student during the semester. The maximum academic load for graduate students is 15 semester hours.

In the eight-week summer session the maximum load is nine semester hours. It is recommended that a fully employed person not enroll for more than six hours during any semester.

If a student holds an assistantship the academic class load is adjusted accordingly.

Scholastically, the ideal academic work load for graduate assistants is nine (9) hours. An assistant wishing to take fewer than nine (9) hours or more than twelve (12) hours must have a recommendation by his or her graduate adviser which is approved, in writing, by the Dean of the Graduate School.

Auditing Privileges

A student may register as an auditor in a class or classes if facilities are available. An auditor does not participate in the activity of the class, but is expected to attend. To register as an auditor, a student must register for the course. Then the student must get the instructor's signature on an auditor's permit which can be obtained from the Registration Office. Students must register to audit a course by the last day for making program changes, with any exception having the approval of the department Chairperson in which the course is offered and the Dean of the Graduate School. The auditor fee is shown in the section on costs. Students who are registered for 12 or more hours for credit may audit courses without additional fees. Audited courses are considered part of the student's total load.

Graduation

The graduate catalog contains detailed information on requirements for graduation.

Each student must meet all requirements for his curriculum.

A graduate student must apply for graduation in the Graduate Office, 310 Hovey Hall, before the deadlines specified for each session in the calendar in this catalog. At the time application is made, the graduation fee of \$15 must be paid.

Commencement

Degrees are conferred and diplomas award-

ed after the close of each semester and summer session. Commencement is held once each year at the end of the spring session. Participation is voluntary. Graduate students who expect to complete degree requirements prior to May commencement may participate in that commencement. Those who will finish their degree requirements after May commencement may participate in the following commencement during the next academic year.

Colleges of the University

Faculty and academic programs at Illinois State are organized into five colleges.

College of Applied Science and Technology

The Departments of Agriculture, Corrections, Home Economics and Industrial Technology, Health, Physical Education, Recreation and Dance, and the Center for Allied Health Professions constitute the College of Applied Science and Technology. Undergraduate and graduate programs of the College are designed to prepare students for positions as professional educators in all types of educational institutions as well as for non-teaching vocational, professional and technical careers.

College of Arts and Sciences

The primary purpose of the College of Arts and Sciences is to provide a broadly based educational program. The College includes the Departments of Biological Sciences, Chemistry, Economics, English, Foreign Languages, Geography-Geology, History, Information Sciences, Mathematics, Philosophy, Physics, Political Science, Psychology, Sociology-Anthropology, and Speech Pathology-Audiology. The College offers the core of the University Studies program required of all undergraduates, a wide range of academic major and minor programs for meeting baccalaureate degree requirements, master's programs in most disciplines, and doctoral programs in Biological Sciences, Economics, English, History, and Mathematics. Course offerings span the humanities, social and be-

havioral sciences, mathematics and natural sciences.

College of Business

The basic objective of the College of Business is to serve the needs of undergraduate and graduate students preparing for professional, managerial and administrative positions in business, industry, government and non-profit organizations and those preparing for professional business education careers at all levels. The College includes the Departments of Accounting, Business Administration and Business Education and Administrative Services.

College of Education

The College of Education includes the Departments of Curriculum and Instruction, Educational Administration, Special Education, and the Office of Clinical Experiences and Admission-Retention in Teacher Education. The College of Education has three broad missions: (1) rigorous preparation of quality instruction, supervisory, and administrative personnel to serve in all sectors of the economy in various capacities and at all levels of teaching and learning, (2) systematic study, research, and evaluation of educational concerns within diverse cultural contexts plus the concinnitant utilization of that research for society's benefit; and (3) active involvement in service activities designed to improve the quality of life through education and to identify new directions for the College. The College administers clinical experiences and an admission-retention program in undergraduate teacher education in addition to offering a wide range of graduate programs, including a doctoral program in Educational Administration.

College of Fine Arts

The primary function of the College of Fine Arts and its Departments of Art, Music and Theatre is to provide professional training in the arts for students preparing to be elementary, secondary and college teachers and for students desiring professional careers in select areas of

the arts. Various areas of concentration in undergraduate and graduate studies, including MFA programs and a doctoral program in Art, provide flexible curricula for a variety of student talents and research interests. The College also provides a cultural environment through the performing and visual arts for the campus, community and region.

Departments and Course Offerings

Semester Plan

The University operates on the semester plan. The value of courses is, therefore, in terms of semester hours. A semester hour is assigned for a fifty-minute period of lecture or discussion for a semester of 18 weeks. For laboratory two 50-minute periods are necessary for a semester hour.

Course Numbering System

This **Graduate Catalog** contains courses numbered 300 to 599.

300-399 Advanced undergraduate and graduate courses. Open to juniors, seniors and graduate students.

400-499 Graduate courses.

500-599 Courses limited to advanced graduate or doctoral students.

The following information is given for each course, in the following order: course number (3 digits preceding the title), course title and credit value (in semester hours). Following the above course description any prerequisites, restrictions on enrollment, and any special considerations are noted.

Teaching Staff

The members of the teaching staff of each department are listed in the departmental sections which follow. The entire faculty for the Graduate School is shown in a section after **Departments and Course Offerings**.

General Courses

A list of general courses offered in all departments is found on page 118.

Accounting

(See Business)

Agriculture

Chairperson of the Department: George W. Forney. Office: 138 Turner Hall.

Teaching Staff: M. Balbach, B. Bristol, W. Chrudimsky, A. Culver, G. Forney, F. Fuess, R. Henry, K. James, J. McBee, J. Sagebiel, M. Turner, H. Woods.

Programs Offered

The Department of Agriculture participates in an inter-institutional M.S. Program in Agriculture with the University of Illinois. The primary purpose of this cooperative program is

to provide an opportunity for professional workers in the field of Agriculture living in the Normal and Bloomington area to pursue advanced degrees at the University of Illinois. For details of this program contact the Department of Agriculture at Illinois State University.

Courses

302 SPECIAL PROBLEMS IN AGRICULTURE

1-3 sem. hrs.

Special work in research interests of student and staff. Projects must be approved by the staff member and the chairperson of the department. Prerequisite: Comprehensive maj, maj. or min in AGR, GPA 2.5, Consent of instructor and department chairperson. May be repeated. Max. 6 hours.

303 SEMINAR IN AGRICULTURE**1 sem. hr.**

Senior or graduate standing.

314 GRAIN MARKETING**2 sem. hrs.**

Economics and marketing problems in grain industry. Special emphasis on futures marketing. Prerequisite: AGR 214.

316 LIVESTOCK MARKETING**2 sem hrs.**

Economic principles applied to marketing of livestock and livestock products. Consideration given to producers, processors, and distributors. Prerequisite: AGR 214.

318 AGRICULTURE FINANCE**3 sem. hrs.**

The principles of agriculture finance including the capital requirements, the sources of credit, and the optimum uses of capital. Prerequisite: AGR 216 or ACC 131.

345 AGRICULTURAL ACCIDENT**PREVENTION****3 sem. hrs.**

Major problems of accident causation and prevention applicable to agriculture and the need for farm safety education. Also offered as IT 373.

352 TURF MANAGEMENT**3 sem. hrs.**

Principles and practices used in management of turf grasses, residential and recreational turf. Prerequisites: AGR 150 and BSC 121.

355 PLANT BREEDING**3 sem. hrs.**

Breeding procedures and techniques used in developing new varieties of field crops. Prerequisite: AGR 272.

356 PLANT PROPAGATION**3 sem. hrs.**

Basic principles and commercial practices involved in sexual and asexual propagation of agricultural plants. Prerequisite: AGR 150, or BSC 121. Lecture and laboratory.

357 SOIL FERTILITY AND FERTILIZERS**4 sem. hrs.**

Fundamental concepts of soil fertility and fertilizer manufacturing. Plant nutrition, factors affecting plant growth, soil-plant relationships, and macro- and micro-nutrients. Prerequisite: AGR 157. Lecture and laboratory. Field trips required.

360 CROP CONDITIONING AND STORAGE**3 sem. hrs.**

A comprehensive study of the chemical, phys-

ical and physiological aspects of crop conditioning and storage. Major emphasis will be placed on soybeans and grain crops but other agricultural crops and products will be considered. Prerequisite: AGR 250 and 5 hrs. CHE, or consent of instructor.

372 LIVESTOCK BREEDING**3 sem. hrs.**

Reproduction and principles of heredity and their application to livestock breeding; population genetics, inbreeding, relationship, outbreeding and selection. Prerequisites: AGR 272 or BSC 319.

373 REPRODUCTIVE PHYSIOLOGY**AND MILK SECRETION****3 sem. hrs.**

Reproduction in livestock, anatomy of the reproductive and hormonal systems, physiological and hormonal aspects of lactation. Prerequisites: AGR 170, 272.

374 DAIRY CATTLE FEEDING AND MANAGEMENT**3 sem. hrs.**

Feeding and management of dairy cattle as they relate to an economic dairy farm operation. Prerequisite: AGR 274. Field trips required.

375 ANIMAL NUTRITION**3 sem. hrs.**

Science of animal nutrition; special attention to recent discoveries pertaining to the protein, mineral and vitamin requirements of livestock. Prerequisites: AGR 170, 171.

396 METHODS AND PROCEDURES IN AGRICULTURAL EDUCATION**5 sem. hrs.**

Procedures in planning, conducting, evaluating and teaching preparation necessary for a complete program in agricultural education. Field trips required.

Anthropology

(See Sociology-Anthropology)

Art

Chairperson of the Department: Fred V. Mills. Office: Center for the Visual Arts - Room 119.

Director of Doctoral Studies: Max R. Rennels.

Director of Masters Studies: Jack Hobbs.

Teaching Staff: F. Anderson, G. Barford, H.

Boyd, J. Butler, W. Colvin, N. Ernest, R. Freyberger, R. George, H. Gregor, W. D. Hartley, R. Hentz, J. Hobbs, K. Holder, R. Jackson, K. Knoblock, J. Kohn, T. Malone, J. Marlow, R. Mawdsley, J. McClain, F. Mills, B. Moore, J. Myers, M. Newby, E. Niemi, M. Rennels, R. Salome, E. R. Stefl, C. L. Steinburg, A. Sweet, D. Tell, B. Tinsley, N. Tower.

The Department offers work leading to the following degrees: M.A., M.S., M.S. in Ed., M.F.A., and Ed.D. General University requirements for degrees are described elsewhere in this catalog.

The Department reserves the right to keep examples of original work produced by graduate students for its permanent collection of student art work.

RESIDENCE REQUIREMENTS

A candidate for a master's degree must spend at least one full term in residence in order to qualify for the degree. A full term may be interpreted as one semester, with a class load of 8-15 hours, or a summer session with a class load of from 6-9 hours.

Art Education

The Master's Degree Program in Art Education can lead to either the M.A., M.S., or M.S. in Ed. degree. Each student's program is developed in consultation with an adviser from the Art Education Area. The major concentration of work—at least 15 hours—must be devoted to some field of Art Education. In addition to this, a minor concentration may be chosen from a wide range of fields which are relevant to art or education and which reflect the student's interests. Some examples are: an area of Studio Art, Curriculum, Psychology, Special Education, Community Art Programs, College Level Art, and Humanities.

Art Studio

The master's degree program in Art Studio may lead to either the M.A., or M.S. degree. These degrees are offered with concentrations in painting, sculpture, printmaking, ceramics, weaving, jewelry, design, photography, drawing and glassblowing. The program will be developed in consultation with an adviser from the major studio area. Each program is designed with the individual student's strengths and interests in mind.

Art History

The master's degree program in Art History

may lead to either the M.A. or the M.S. degree. The program will be developed in consultation with an adviser from the Art History area. Each program is designed with the individual student's strengths and interests in mind.

Master of Fine Arts

The Master of Fine Arts in Art is a 60 hour program that emphasizes both the theory and practice in the production, history and teaching of the visual arts. Candidates will be expected to demonstrate artistic proficiency in at least one of the following disciplines: painting, sculpture, printmaking, ceramics, weaving, jewelry, design, drawing or glassblowing. Candidates will also be expected to demonstrate an ability to communicate ideas in a written and oral manner.

Since a primary objective is to prepare teachers for a higher education, students will also be expected to participate in an experience of internship or apprenticeship. This may take the form of a guided teaching experience or work in a professional area related to the student's area of interest. (Conceivably this might involve local industry, school, etc.) The exact nature of this experience will be worked out through counseling between the major adviser and the student and will be tailored to best suit the needed experience for each student. This project will be subject to approval of the student's graduate committee.

It should be clearly understood that the accumulation of 60 semester credit hours is not the primary criterion in evaluating final achievement. Instead, it is the exhibition and demonstration of the student's competency and his intellectual maturity and that these expectations be deemed proficient in his area of the arts. In view of this, a major requirement will be a comprehensive showing of the student's visual work and a written and/or oral examination of the intellectual implications of his chosen field.

A typical program for the Master of Fine Arts degree will include at least 60 semester hours of graduate work beyond the bachelor's degree. These 60 hours may be programmed as follows:

a. At least 36 semester hours must be taken in the Art Department, of these at least 24 must be at the 400 level.

b. At least 24 semester hours must be in the student's major studio area, of these at least 18 must be at the 400 level.

c. At least 12 semester hours may be taken in art history, or nine hours may be taken in art

history with three hours in related areas such as aesthetics, philosophy, or anthropology.

d. At least three semester hours in an internship or apprenticeship program. The exact nature of this program will be determined by the student and his major adviser and designed to best suit the needs of the individual student.

e. At least three semester hours of an elective outside the Art Department.

f. Six hours of Thesis 499. This will involve a comprehensive exhibition of studio work, an exhibition-related written project, and a comprehensive oral examination.

Doctor of Education Degree in Art

The degree requirements for the doctoral degree in the practice and teaching of Art have been structured for maximum flexibility. There are few specific course or hour requirements other than those necessary for establishing residency. The individual students with the approval of the Director of Doctoral Studies and later with his committee may design a plan of studies based upon both need and interest. The major studies are completed in the Art Department with a minor in any department which offers a graduate program. The student's specific course of study should facilitate transition through the program with professional competence and employability being the guide. The sequential procedure leading to the completion of the degree requirements is as follows:

a. Admission to advanced graduate standing in the Department of Art.

b. A tentative advanced graduate study program planned in consultation with the Director of Graduate Studies in Art.

c. A Degree Program Interview (for final approval of degree study program).

d. Admission to doctoral candidacy.

1. Submission of a final plan of studies.

2. Preliminary Comprehensive Examinations following completion of approximately two-thirds of the planned course requirements.

3. Approval of the dissertation topic by the student's committee and the Graduate School.

e. Completion of terminal degree requirements within five years of the date on which candidacy was granted.

Courses

309 PROFESSIONAL ART EDUCATION

CORE

3 sem. hrs.

Learning theory, studio skills and art teaching methodology. Not for credit if had Art 202 or Art 203. For Art Education major, others by consent of department chairperson. Two consecutive semester sequence.

321 PHILOSOPHY OF ART

3 sem. hrs.

324 JEWELRY III

(formerly ADVANCED JEWELRY
AND SILVERSMITHING)

2-6 sem. hrs.

Prerequisite: Art 225. May be repeated. Materials charge.

326 VISUAL COMMUNICATIONS III

3 sem. hrs.

Advanced studio work in advertising and editorial layout. Prerequisites: Art 226 and 227. Materials charge.

328 CERAMICS III

(formerly ART 327)

2-6 sem. hrs.

Prerequisite: Art 229. May be repeated. Materials charge.

331 ADVANCED DRAWING

1-3 sem. hrs.

Prerequisite: Art 214. May be repeated.

332 SCULPTURE III

2-6 sem. hrs.

Prerequisite: Art 233. May be repeated. Materials charge.

340 WEAVING III

2-6 sem. hrs.

Prerequisite: Art 241. May be repeated. Materials charge.

345 PRINTMAKING II

(formerly ADVANCED GRAPHICS)

2-6 sem. hrs.

Prerequisite: Art 245. May be repeated. Materials charge.

351 SPECIAL PROJECTS IN ART

2-6 sem. hrs.

Prerequisite: Consent of instructor. May be repeated. Materials charge.

355 GLASS II

2-6 sem. hrs.

Advanced skills of creating hand blown glass. Prerequisite: Art 255. May be repeated. Materials charge.

351 PAINTING IV**2-6 sem. hrs.**

Prerequisite: Art 263. May be repeated.

356 ANCIENT ART**3 sem. hrs.**

Art and architecture of early civilizations of Egypt, Mesopotamia and peripheral areas from circa 8000 B.C. to circa 300 B.C.

367 CLASSICAL ART**3 sem. hrs.**

Art and architecture of the Aegean, Greek and Roman worlds from circa 3000 B.C. to the era of Constantine.

369 HISTORY OF MEDIEVAL ART AND ARCHITECTURE**3 sem. hrs.**

Art and architecture of Europe from circa 500 A.D. to the Renaissance.

372 MODERN ARCHITECTURE**(formerly Art 483)****3 sem. hrs.**

Late 19th and 20th century architecture. Sullivan, Wright and the Chicago School. European movements involving Le Corbusier, Gropius, and Mies Van de Rohe. The great engineers, Maillart, Nervi, Fuller, Candela.

373 PRE-COLUMBIAN ART**INDIAN ARTS OF MIDDLE AMERICA****3 sem. hrs.**

Art of Mexico and Yucatan before the arrival of the Spanish.

375 ITALIAN RENAISSANCE ART**3 sem. hrs.**

Painting, sculpture, and architecture of the 15th and 16th centuries in Italy.

376 NORTHERN RENAISSANCE ART**3 sem. hrs.**

Art and architecture of the Renaissance and Manerism in Northern Europe.

377 HISTORY OF BAROQUE AND ROCOCO ART**3 sem. hrs.**

Painting, sculpture, and architecture of Europe during the 17th century.

378 HISTORY OF 19TH CENTURY ART AND ARCHITECTURE**3 sem. hrs.**

Concentration is centered on the art of Europe from the French Revolution to the 20th century.

379 MODERN ART**3 sem. hrs.**

Painting and sculpture in Europe and America from the late 19th century to 1970.

380 ART IN THE UNITED STATES I:**COLONIAL-19TH CENTURY****ROMANTICISM****3 sem. hrs.**

American art from the Colonial Period through 19th Century Romanticism.

381 ART IN THE UNITED STATES II:**AMERICAN IMPRESSIONISM-****WORLD WAR II****3 sem. hrs.**

American art from late 19th century Impressionism to the advent of World War II.

382 ART IN THE UNITED STATES III:**WORLD WAR II TO THE PRESENT****3 sem. hrs.**

Complex artistic developments which occurred in the United States from World War II to the present.

401 FOUNDATIONS OF ART**EDUCATION****3 sem. hrs.**

A study of the historical and philosophical foundations of art education.

402 ISSUES IN ART EDUCATION**2 sem. hrs.**

Problems in art education from the point of view of research and experimentation. Development of instructional methods and materials, and means of testing their validity.

403 SCHOOL PROGRAMS IN ART**2 sem. hrs.**

Problems relating to the development and administration of total public school art programs in communities of different sizes.

411 ISSUES IN TEACHING**ELEMENTARY ART****3 sem. hrs.**

Art program from kindergarten through the sixth grade: content, methods, and teaching materials. The role of art in the total curriculum.

412 ISSUES IN TEACHING SECONDARY**ART****3 sem. hrs.**

The art program at the junior, senior high, and junior college levels: content, methods, and teaching materials. The role of art in the total curriculum.

421 PROBLEMS IN TEACHING ART IN HIGHER EDUCATION**2-5 sem. hrs.**

Opportunity for observation, participation, and teaching at the college level. Assignments are made with the approval of the department chairperson at least two months prior to registration.

422 COLLEGE PROGRAMS IN ART**2 sem. hrs.**

Planning and administration of college and university art programs.

425 PSYCHOLOGY OF ART**3 sem. hrs.**

A survey of philosophical and psychological studies of the creative individual; art appreciation and production, and the art product; consideration of social and educational implications.

444 PROBLEMS IN STUDIO WORK**2-6 sem. hrs.**

Individual study and direction in creative activity. May be repeated. Must have permission of the instructor. Materials charge.

451 SPECIAL PROJECTS IN ART**2-6 sem. hrs.**

Special project in art or art education chosen by the student for investigation with the approval of the instructor and the chairperson of the department. A student may enroll in this course for credit more than once if the material covered is not duplicated. Materials charge.

471 PRIMITIVE ART**3 sem. hrs.**

Art of preliterate cultures in several parts of the world and the culture traits, complexes, and institutions associated with them.

482 CONTEMPORARY PAINTING**3 sem. hrs.**

Backgrounds for 20th century paintings. Major movements in modern painting: Impressionism, Post-Impressionism, Dada, Surrealism, Social Consciousness, Regionalism, Abstract Expressionism, Painting Today. Paints must be bought.

491 INTERNSHIP IN COLLEGE TEACHING IN ART**3 sem. hrs.**

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH METHODOLOGY**3 sem. hrs.**

Introduction and survey of bibliography, methods of scholarly research and critical evaluation of research and writings in the field.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

597 INTRODUCTION TO RESEARCH METHODOLOGY**3 sem. hrs.**

Introduction to bibliography, methods of scholarly research and critical evaluation of experimental studies in the field.

599 DOCTORAL DISSERTATION**Variable credit**

Research involving the gathering of data to form the basis for the doctoral dissertation. Approval of the chairperson of the department is required.

Biological Sciences

Chairperson of the Department: Howard R. Hetzel. Office: Felmley Hall 206.

Teaching Staff: R. Anderson, D. Birkenholz, H. Brockman, L. Brown, L. Cadwell, J. Cain, R. Chasson, T. Chuang, B. Cole, J. Cralley, E. Dilks, K. Fitch, J. Frehn, H. Hetzel, H. Huizinga, D. R. Jensen, A. Katz, A. Liberta, D. McCracken, L. Mentzer, O. Mizer, E. Mockford, M. Nadakavukaren, M. Neville, R. Preston, E. I. Rhymer, F. Schwalm, M. Seligman, J. Tone, J. Ward, D. Weber, R. Weigel, E. Willis.

Joint Appointment with Chemistry: A. Richardson, J. Tsang.

The Department offers work leading to the following degrees: M.S., M.S. in Ed., and Ph.D. Master's degree students are required to take the following courses: **300 or 301** — Readings in Biological Sciences, and two semester hours in Research Seminar 497. In addition to the above courses, master's degree students in the comprehensive program are also required to take two semester hours of **305** — Special Problems in Biology.

Ph.D. students are required to take the following courses: **300 or 301** — Readings in Biological Sciences and four semester hours in Research Seminar 497. University requirements for the M.S. and Ph.D. degrees are described elsewhere in this catalog.

A student working toward the Ph.D. degree in Biology may concentrate studies in the following areas: botany, genetics, microbiology, physiology, or zoology.

Ph.D. Language Requirements

General language requirements of the Graduate School apply. With the approval of the Departmental Graduate Curriculum Committee, the chairperson of the Department may permit the substitution of Psychology 440 and 441 OR Mathe-

matics 350 and 351 for one of the two foreign language requirements. The student is required to earn a grade of A or B in both of the courses in the sequence he selects.

Courses

300 and 301 READINGS IN BIOLOGICAL SCIENCES

1 sem. hr. each

Readings of classical and modern biology literature.

302 HISTORY OF BIOLOGY

3 sem. hrs.

A study of great biologists emphasizing their contributions to the development of the biological sciences.

303 NATURAL SCIENCE FOR ELEMENTARY TEACHERS

3 sem. hrs.

Present-day developments in science instruction. Not for credit maj.-min.

304 SEMINAR IN BIOLOGY

1 sem. hr.

Oral and written reports on current topics in biology.

305 SPECIAL PROBLEMS IN BIOLOGY

1-3 sem. hrs.

Projects must be approved by the supervising faculty member and department chairperson prior to registration.

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

Intensive study of particular lands, environments, cultures, and peoples. Prerequisite: Consent of instructor. Usually given cooperatively with other departments.

307 METHODS IN THE TEACHING OF BIOLOGY

2 sem. hrs.

Methods, techniques, materials, and problems peculiar to the teaching of biology at the secondary school and college levels. Prerequisite: Senior or graduate standing and consent of instructor.

318 LABORATORY TECHNIQUES

2 sem. hrs.

Preparation of microscope slides, special techniques for whole mounts, plastic embedding, plastic injections, and nerve preparations. Lecture and laboratory.

319 GENETICS

4 sem. hrs.

Data and concepts of genetics from Mendel to the present. Prerequisite: BSC 121, 190, and 260, or consent of instructor. Lecture and laboratory.

320 PLANT PATHOLOGY

4 sem. hrs.

Lecture and laboratory. Prerequisite: BSC 121. Morphology, life histories, host-parasite relationships and control measures for fungal, bacterial, and viral pathogens.

331 TAXONOMY AND EVOLUTION OF VASCULAR PLANTS

4 sem. hrs.

Plant classification and evolution with emphasis on native and naturalized species. Prerequisite: BSC 121. Lecture and laboratory.

332 TAXONOMY OF NON-VASCULAR PLANTS

4 sem. hrs.

Plant classification with emphasis on the evolution of algae, fungi, and bryophytes.

333 EVOLUTIONARY MORPHOLOGY OF VASCULAR PLANTS

4 sem. hrs.

Comparative survey of structure, life histories, reproductive mechanisms, and evolutionary relationships of vascular plants. Lecture and laboratory. Prerequisite: BSC 121.

334 INTRODUCTORY MYCOLOGY

3 sem. hrs.

Morphology, taxonomy, and evolution of the fungi. Prerequisite: BSC 121. Lecture and laboratory.

340 ADMINISTRATION OF SCHOOL HEALTH PROGRAMS

3 sem. hrs.

Development and organization of school health programs including services, environment, and instruction.

360 SANITATION

4 sem. hrs.

Fundamental principles of environmental sanitation: water, waste water, streams, solid wastes, food, air, and radiation. Prerequisite: BSC 260. Lecture and laboratory.

365 PSYCHOLOGY

4 sem. hrs.

Morphology, taxonomy, physiology, and ecology of the algae. Prerequisite: BSC 121. Lecture and laboratory.

381 APPLIED HUMAN ANATOMY

4 sem. hrs.

Musculo-skeletal and nervous systems emphasized. Prerequisite: BSC 182 or HPR 182 or consent of instructor. Lecture and laboratory.

382 THE EYE—A LABORATORY AND CLINICAL STUDY**3 sem. hrs.**

Anatomy and physiology of the eye. Lecture and laboratory supplemental with clinical demonstrations on the detection and care of eye disorders.

383 PARASITOLOGY**4 sem. hrs.**

Morphology, life histories, and host-parasite relationships of arthropod, helminth, and protozoan parasites. Prerequisite: BSC 190. Lecture and laboratory.

385 PHYSICAL DEFECTS—SURVEY AND REHABILITATION**3 sem. hrs.**

Identification and treatment of physical defects of handicapped children; special services, equipment, and procedures for school programs. Prerequisite: BSC 381. Also offered as HPR 385. Lecture and laboratory.

386 GROSS ANATOMY**4 sem. hrs.**

Human body exclusive of head and neck. Prerequisite: BSC 182 or 192 or HPR 182.

387 GROSS ANATOMY**2 sem. hrs.**

Human head and neck. Prerequisite: BSC 182 or 192 or HPR 182.

390 EVOLUTION**3 sem. hrs.**

Environmental, behavioral, and genetic mechanisms involved in the processes of evolution. Prerequisite: BSC 319 or consent of instructor.

391 ENTOMOLOGY**4 sem. hrs.**

Comparative anatomy of the insects. Prerequisite: BSC 190. Lecture and laboratory.

392 EMBRYOLOGY**4 sem. hrs.**

Comparative embryology of the vertebrates with emphasis on avian and mammalian embryos. Lecture and laboratory.

394 PROTOZOOLOGY**4 sem. hrs.**

Survey of the Phylum Protozoa, emphasizing morphology, physiology, reproduction, and taxonomy. Prerequisite: BSC 190. Lecture and laboratory.

395 BIOLOGY OF THE LOWER INVERTEBRATES**4 sem. hrs.**

The biology of fish, amphibians, and reptiles. Prerequisite: BSC 190. Lecture and laboratory.

396 BIOLOGY OF THE HIGHER VERTEBRATES**4 sem. hrs.**

The biology of birds and mammals. Prerequisite: BSC 190. Lecture, laboratory, and field trips.

401 ADVANCED ECOLOGY**4 sem. hrs.**

Physiological, population, and evolutionary ecology. May be repeated for credit with permission of Department Chairperson and Instructor. Lecture and laboratory. Prerequisites: Biological Sciences 201; courses in Physiology and Genetics.

402 LIMNOLOGY**4 sem. hrs.**

Ecological study of streams, ponds, and lakes. Field trips to varied habitats and aquatic field stations. Lecture and laboratory. Prerequisite: Biological Sciences 201.

416 CELLULAR PHYSIOLOGY**5 sem. hrs.**

A study of fine structure and physiochemical properties of the cell. Lecture and laboratory. Prerequisite: Consent of instructor.

417 CYTOLOGY**4 sem. hrs.**

Organization of cells with emphasis on the relationships between structure and function. Lecture and laboratory. Prerequisite: Biological Sciences 319.

418 ELECTRON MICROSCOPY**4 sem. hrs.**

Preparation, staining, embedding and sectioning procedures, negative staining and vacuum evaporation techniques, preparation of specimen support membranes, photographic methods, use of the electron microscope and introduction to electron optics. Lecture and laboratory. Prerequisite: Consent of instructor.

419 ADVANCED GENETICS**4 sem. hrs.**

Recent developments in genetics including topics of genetic recombination, gene structure and function, mutation and gene regulation. Lecture. Prerequisite: Biological Sciences 319 or consent of instructor.

420 SEMINAR IN BIOLOGY**1 sem. hr.**

Topics in various fields of biology. This course may be repeated for credit.

421 CYTOGENETICS**4 sem. hrs.**

Correlation of cytology with genetics. Lecture and laboratory. Prerequisites: Biological Sciences 319 and 417.

425 RADIATION BIOLOGY**4 sem. hrs.**

Interactions of radiation at the molecular, cellular, organismic, and population levels. Lecture and laboratory. Prerequisite: Consent of instructor.

426 SPECIAL TOPICS IN PLANT PHYSIOLOGY**2 sem. hrs.**

Lectures in selected areas of plant physiology: water and mineral relations, carbon and nitrogen metabolism, plant growth and development. Course may be repeated for credit. Prerequisite: Chemistry 230, 232 or equivalent.

428 ENZYMOLOGY**3 sem. hrs.**

Mechanism of action, isolation and characterization, biosynthesis, and kinetics of enzymes. Lecture and laboratory. Prerequisite: Chemistry 344, Mathematics 135, consent of instructor.

433 PLANT ANATOMY AND HISTOLOGY**3 sem. hrs.**

Origin, development, and structure of tissues in vascular plants. Lecture and laboratory. Prerequisite: Consent of instructor.

440 EPIDEMIOLOGY**3 sem. hrs.**

Principles related to the incidence and control of epidemic diseases. Etiology, pathogenesis, host response, identification, and diagnostic procedures. Lecture. Prerequisite: Biological Sciences 260.

450 ADVANCED STUDIES IN SPECIALIZED FIELDS**1-4 sem. hrs.**

Recent developments in such fields as biochemistry, biophysics, biomathematics, biological oceanography, ecology, ethology, reproductive and developmental biology, invertebrate zoology, parasitology, systematics, psychology, plant ecology. Prerequisite: Consent of instructor. May be repeated.

464 ADVANCED MYCOLOGY**3 sem. hrs.**

Isolation, culturing, physiology, and ultrastructure of fungi. Lecture and laboratory. Prerequisite: Biological Sciences 334 or consent of instructor.

466 MICROBIAL PHYSIOLOGY**5 sem. hrs.**

Fundamental concepts and techniques of bacteriology. Anatomical, nutritional, and metabolic properties. Microbiological assays. Prerequisites: Biological Sciences 260 and Chemistry 215 and 232.

467 MICROBIAL GENETICS**5 sem. hrs.**

Heredity in microorganisms and the viruses as a branch of microbiology. Lecture and laboratory. Prerequisites: Biological Sciences 260 and 319, Chemistry 215, 232 or consent of instructor.

480 HISTOLOGY**4 sem. hrs.**

Microscopic anatomy of cells, tissues and organs of vertebrates. Lecture and laboratory.

481 SENSORY PHYSIOLOGY**3 sem. hrs.**

Structural and functional aspects of the sensory systems. Topics considered include photoreception, chemoreception, action potentials, hearing, sensory pathways and associated brain centers. Lecture and laboratory. Prerequisite: Biological Sciences 482 or consent of instructor.

482 MAMMALIAN PHYSIOLOGY**4 sem. hrs.**

The physiology of muscular nervous and circulatory organ systems. Lecture and laboratory. Prerequisite: Course in vertebrate anatomy and organic chemistry or consent of instructor.

483 MAMMALIAN PHYSIOLOGY**4 sem. hrs.**

The physiology of the respiratory, excretory, digestive and reproductive systems. Lecture and laboratory. Prerequisite: Biological Sciences 482, Chemistry 232.

484 HUMAN DEVELOPMENT AND BEHAVIOR**3 sem. hrs.**

Basic genetics, developmental biology, physiology and endocrinology for students in education, psychology, health and physical education and special education. Prerequisite: Consent of instructor.

485 ENDOCRINOLOGY**4 sem. hrs.**

Hormonal systems in vertebrates and invertebrates. Lecture and laboratory. Prerequisites: Chemistry 344 and Biological Sciences 482, 483 or consent of instructor.

486 ETHOLOGY**4 sem. hrs.**

The behavior of animals under natural conditions as interpreted through comparative studies and experimentation. Lecture and laboratory. Prerequisite: Equivalent of Biological Sciences 199 or consent of instructor.

487 HUMAN GENETICS**4 sem. hrs.**

Gene action, population genetics, biochemical genetics, mutation genetics, and practical applications of genetics with primary emphasis on humans. Prerequisite: Biological Sciences 319.

491 INTERNSHIP IN COLLEGE TEACHING IN BIOLOGICAL SCIENCES**3 sem. hrs.**

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491). Prerequisite: Consent of Department Chairperson.

492 DEVELOPMENTAL BIOLOGY**4 sem. hrs.**

Concepts of differentiation, induction and of regulatory mechanisms involved in regeneration, aging, carcinogenesis and immune response, are discussed. Labs demonstrate approaches to morphological, experimental and biochemical analysis of developmental processes. Lecture and laboratory. Prerequisites: Biological Sciences 319 and 392.

493 BIOPHYSICS**3 sem. hrs.**

The application of principles of physics to biological problems. Attention will be given to: electromagnetic radiation, optics and microscopy, radioactivity, and bioelectric potentials. Lecture and laboratory. Prerequisite: Mathematics 135, Physics 109, Chemistry 232, or consent of instructor.

495 COMPARATIVE ANIMAL PHYSIOLOGY**4 sem. hrs.**

A comparative study of the physiology of the organ systems with emphasis on invertebrates. Topics considered include osmotic balance, nutrition, nitrogen excretion, respiration, metabolism, endocrine mechanisms, excitation and contractility and bioluminescence. Lecture and laboratory. Prerequisite: Biological Sciences 191; Chemistry 232 or consent of instructor.

497 INTRODUCTION TO RESEARCH**METHODOLOGY****1-6 sem. hrs.**

Introduction to bibliography, methods of scholarly research and critical evaluation of research.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

599 RESEARCH IN THE BIOLOGICAL SCIENCES**Variable credit**

Research involving the gathering of data to

form the basis for the dissertation required for the Ph.D.

Botany (See Biological Sciences)**Business**

The College of Business offers several graduate programs in its three departments. The Department of Accounting offers the M.S. in Accounting. This new degree program is a logical follow-on to the comprehensive baccalaureate program in that department and embodies advanced theories and concepts that contribute to the increasing professionalization of the student. The Department of Business Administration offers the Master of Business Administration Degree (MBA). The Department of Business Education and Administrative Services offers the M.A., M.S. and M.S. in Ed. degrees oriented principally toward the teaching of business subjects at the secondary school level.

Department of Accounting

Chairperson of the Department: James A. Hallam. Office: Stevenson Hall 435A.

Teaching Staff: E. Carey, G. Chapman, J. Hallam, T. Secoy, R. Tussing.

Master of Science in Accounting

The Master of Science in Accounting degree is designed for the student who is interested in professional accounting. It is anticipated that upon completion of a degree the student will be employed in a public accounting firm or an accounting area of business or government. The Master of Science in Accounting degree is based upon the recommendations of the American Institute of Certified Public Accountants. The AICPA has recommended a fifth year of academic preparation prior to entering public accounting. This degree is designed to meet that fifth year need.

ADMISSION REQUIREMENTS

All University and Graduate School requirements for admission to a degree program of the Graduate School at Illinois State University will apply. Graduate students who have been admitted to the University will be admitted to the Master of Science in Accounting degree program only after successfully completing the Graduate Management Admission Test (GMAT). A score of 450 is generally considered an acceptable score if the student has a 3.0 GPA on a 4.0 = A scale.

Before entering the program students will normally have had a Bachelor of Science in Accounting degree; otherwise, there may be deficien-

cies. Deficiencies will be determined by the chairperson of the Department of Accounting.

ACADEMIC ADVISER

The chairperson of the Department of Accounting serves as the academic adviser for the Master of Science in Accounting graduate students. It is recommended that undergraduate students who are considering a Master of Science in Accounting degree should make arrangements with the academic adviser to determine deficiencies and to develop a plan of study for the complete program. Thus, the student should see the adviser to discuss the entire program including the comprehensive examination.

TRANSFER CREDIT

Refer to page 19 for Graduate School policy on transfer of credit.

TIME LIMITATIONS

Refer to page 19 for Graduate School policy on time limitations.

Courses

Normally, the following courses will not count toward an M.S. in Accounting: Accounting 333, 335, 450, and 464.

330 FUND ACCOUNTING

3 sem. hrs.

Accounting applications to financial planning and control for non-profit institutions. Prerequisite: 5 hours of accounting. An overall GPA of 2.5 or an A or B in ACC 231.

332 ADVANCED MANAGERIAL ACCOUNTING

3 sem. hrs.

Recent conceptual and analytical developments in the area of management accounting. Prerequisites: ACC 230, 260, BUA 100, and MAT 121. An overall GPA of 2.5 or an A or B in ACC 230.

333 INCOME TAX PROCEDURE

3 sem. hrs.

Emphasis on individual. Introduction to corporation and partnership. Prerequisite: ACC 131 or consent of department chairperson.

334 ADVANCED TAX PROBLEMS

3 sem. hrs.

Intensive examination of corporation, partnership, estate, trusts, and gift tax problems. Prerequisite: ACC 333 or consent of department chairperson. Also an overall GPA of 2.5 or an A or B in ACC 333.

335 AUDITING

3 sem. hrs.

The CPA profession; auditor's opinion; evidence; internal control; auditing standards, programs, procedures and ethics, statistical sampling; working papers. Prerequisite: 12 hours of accounting.

336 AUDITING PROBLEMS

3 sem. hrs.

In-depth analysis of statistical samples, accountants' legal exposure, EDP in auditing, analysis of practical problems encountered by the public accountant in a variety of auditing situations. Prerequisite: ACC 335 or equivalent. Also, an overall GPA of 2.5 or an A or B in ACC 335.

337 ADVANCED ACCOUNTING PROBLEMS

3 sem. hrs.

Theory and problems involved in preparation and interpretation of consolidated statements, estates and trusts, and partnerships. Prerequisite: ACC 232; also, an overall GPA of 2.5 or an A or B in ACC 231 and 232.

361 BUSINESS SYSTEMS ANALYSIS FOR COMPUTER PROGRAMMING

3 sem. hrs.

Introduction to systems analysis and design for business data processing. Prerequisites: ACC 132 and ACC 160 or 260. Also, an overall GPA of 2.5 or an A or B in ACC 160 or 260.

362 ADVANCED BUSINESS SYSTEMS ANALYSIS

3 sem. hrs.

Involves the development of a data processing system, including the development of input files, updating and file maintenance, and design and preparation of reports, and complete documentation of the data processing system. Prerequisites: ACC 361. An A or B in ACC 361, or an overall GPA of 2.5, or consent of department chairperson.

366 ADVANCED BUSINESS DATA PROCESSING

3 sem. hrs.

Advanced applications using disk systems, tape systems and operating systems as applied to business problems using COBOL. Prerequisite: ACC 266 or consent of department chairperson. Also, an overall GPA of 2.5 or an A or B in ACC 266.

367 COMPUTER APPLICATIONS FOR BUSINESS DECISION MAKING

3 sem. hrs.

Dynamic mathematical techniques using accounting data to solve business problems. Linear programming, queuing-line problems,

structure of business games, models. Prerequisite: 9 hours of ACC, including 160 or 260, 12 hours BUA including 100 or MAT 250. An overall GPA of 2.5 or an A or B in ACC 160 or 260, or consent of department chairperson.

368 BUSINESS SIMULATION

3 sem. hrs.

Applications of computer simulation techniques to business problems. Emphasis on systems approach to model building, analysis, and interpretation. Prerequisites: BUA 100, ACC 160 or equivalent. Also offered as BUA 368.

369 DATA PROCESSING CENTER OPERATIONS

3 sem. hrs.

Provides an understanding of the special problems associated with the operation of the data processing function in a business organization. Prerequisites: BUA 220, ACC 260, and ACC 361. An A or B in ACC 260 and 361, or an overall GPA of 2.5, or consent of department chairperson.

375 PROFESSIONAL PROBLEMS

3 sem. hrs.

An in-depth study of contemporary accounting problems with a strong orientation toward the preparation for the CPA examination. Prerequisite: 24 hours of ACC including ACC 337. An overall GPA of 2.5 or an A or B in ACC 230, 231, 232 or consent of department chairperson.

430 ADVANCED ACCOUNTING THEORY

4 sem. hrs.

Fundamental concepts of accounting theory: their nature, structure, history, and development. Relationship and application to current accounting problems. Prerequisite: 15 semester hours of accounting or consent of department chairperson.

431 CURRENT ISSUES IN ACCOUNTING

4 sem. hrs.

Consideration of current issues and controversies in theory and practice; special attention given to authoritative pronouncements and professional literature. Prerequisite: Accounting 430 or 18 hours of accounting or consent of department chairperson.

435 ADVANCED AUDITING

4 sem. hrs.

A critical analysis of auditing standards and procedures, the relationship of trends and developments of the accounting profession to the practice of auditing, including the examination of current professional literature. Prerequisite: Accounting 335, or consent of department chairperson.

439 ADMINISTRATIVE ACCOUNTING

4 sem. hrs.

Accounting as a tool for management planning and control and decision making. Organization of the accounting department; financial and management audits and performance evaluation; cost determination and analysis for administrative purposes. Prerequisites: 15 hours of accounting or its equivalent, and consent of department chairperson.

450 MANAGEMENT ACCOUNTING

4 sem. hrs.

Designed for non-accounting majors. Emphasis on the interpretation and use of accounting data. Prerequisite: 6 hours of accounting or consent of instructor.

464 COMPUTER METHODOLOGY

2 sem. hrs.

Designed for non-accounting majors. File processing and statistical programming. Use of statistical programs previously written and stored on the computer. Not open to students who have six semester hours of computer courses or equivalent..

468 COMPUTER-BASED MANAGEMENT INFORMATION SYSTEMS

3 sem. hrs.

Designing of management information systems modules and their integration into an overall computer-based management information system for business. Prerequisites: Accounting 260 and 361 or consent of department chairperson.

470 ADVANCED STUDIES IN SPECIALIZED FIELDS

2-4 sem. hrs.

Recent developments in accounting, data processing and information systems. May be taken for credit more than once, provided different material is covered. Prerequisite: 15 semester hours of accounting or consent of department chairperson.

497 INTRODUCTION TO RESEARCH METHODOLOGY

4 sem. hrs.

Research methodology, bibliography, reporting techniques, sources of reference materials. Individual practice in conducting and reporting on specific research projects. Prerequisite: 15 semester hours of accounting or consent of department chairperson.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Department of Business Administration

Chairperson of the Department: G. J. Brabb.
Office: Stevenson Hall 439.

Teaching Staff: A. Abdel-Halim, G. Brabb, P. Couch, K. Crepas, W. Eggert, O. Ferrell, J. Grimm, F. Harrison, R. Kerber, E. Marlow, J. Meador, C. Mohr, L. Patterson, R. Potter, D. Robinson, S. Salama, E. Shlens, T. Shin.

Master of Business Administration

The Master of Business Administration degree is designed to prepare the student for a managerial, professional, or administrative career in business, government, education, or social institutions. The MBA graduate acquires knowledge and skills necessary for assuming responsibility at various levels of these organizations. Elective credits allow specialization in areas such as marketing, management, finance, decision systems, or management information systems.

PROGRAM REQUIREMENTS FOR ADMISSION

All University and Graduate School requirements for admission to a degree program in the Graduate School of the University will apply with the exception of the GRE requirement. However, the departmental requirements for admission to a degree program in Business Administration are somewhat higher than those in the Graduate School:

A grade point average (GPA) for the last 60 hours of 2.75 and a total of at least 1000 points computed as follows: 200 (GPA) + (GMAT Score).

Graduate students who hold no master's degree will be admitted unprovisionally to the MBA program only after successful completion of the Graduate Management Admissions Test and completion of any knowledge-base deficiencies. Ideally, the GMAT should be taken before applying for admission to the MBA program.

ACADEMIC ADVISER

Students seeking the MBA should meet with the MBA adviser in the Department and develop a plan of study. The MBA degree assumes an undergraduate knowledge base in business, economics and accounting. Students with undergraduate degrees in business will normally have completed the knowledge base courses. Students

with non-business undergraduate degrees may have to complete courses in one or more knowledge areas before enrolling in the courses available for graduate credit. Specific prerequisite requirements will be determined in consultation with the MBA adviser.

CURRICULUM REQUIREMENTS

All MBA students must complete 34 semester hours as follows:

- 25 hours of required courses (BUA 301, 327, 420, 421, 430, 440, 485; ACC 450)
- 9 hours of graduate electives. The electives should be selected considering the student's career objective.
- A comprehensive oral examination to be completed during the final semester of residence.

TRANSFER CREDIT

Refer to page 19 for Graduate School policy on transfer of credit.

TIME LIMITATIONS

Refer to page 19 for Graduate School policy on time limitations.

Courses

Normally, Master of Business Administration candidates will not be permitted to include Business Administration 320, 330, 339, or 340 in their Plan of Study.

301 DECISION THEORY

3 sem. hrs.

Behavioral and quantitative factors in business decision-making. Emphasis on quantitative methods of making decisions under conditions of uncertainty. Prerequisite: Business Administration 100.

310 BUSINESS IN A LEGAL ENVIRONMENT

3 sem. hrs.

Economic, business, and social values or forces which cause law related to business activities to change and adapt. Prerequisite: Business Administration 110 or consent of instructor.

311 GOVERNMENT REGULATION OF BUSINESS

3 sem. hrs.

Rules and regulations of mergers, monopolies, pricing, advertising, securities, food and drugs, unfair trade practices, utilities and transportation. Prerequisite: Economics 101.

**320 BUSINESS MANAGEMENT—
PRODUCTION****1 sem. hr.**

Overview of production, including plant layout, product development, production planning and control, methods and standards, quality control, and materials management. Prerequisites: Business Administration 100, consent of department chairperson. A six-week course.

**323 HUMAN RESOURCES
MANAGEMENT****3 sem. hrs.**

Principles and procedures relating to manpower management, including staffing, appraisal, training, compensation, and other programs for business and other organizations. Prerequisite: Business Administration 220.

**324 INDUSTRIAL RELATIONS
MANAGEMENT****3 sem. hrs.**

Managing employment relations and work conditions. Emphasis on negotiating, administering labor agreements and impact of collective bargaining on managerial practice. Prerequisites: Business Administration 220, Economics 100.

325 MANAGERIAL DECISION MAKING**3 sem. hrs.**

Treats decision making in the context of an interdisciplinary, interrelated process based on a solid foundation of managerial planning. Prerequisite: BUA 220 or consent of instructor.

326 SMALL BUSINESS MANAGEMENT**3 sem. hrs.**

Field program designed to familiarize the student with the problems of small business owners and/or operators. The student acquires first hand knowledge and experience by dealing with on-going businesses. Prerequisite: 2.0 GPA in the Department of Business Administration; senior or graduate standing in Business.

327 OPERATIONS MANAGEMENT**3 sem. hrs.**

Advanced consideration of decision-making tools applied to manufacturing and other operational areas. Case analyses place emphasis on production management problems. Prerequisite: Business Administration 227.

**329 PURCHASING POLICIES AND
PROCEDURES****3 sem. hrs.**

Purchase of materials, supplies, and equipment for industry, government, and other institutions. Organization for purchasing, internal

requisitioning, and stock control. Prerequisite: ECO 100, ACC 131, or consent of instructor.

**330 BUSINESS MANAGEMENT—
MARKETING****1 sem. hr.**

Overview of major marketing areas using a systems framework. Internal and external environment, marketing plans including pricing and promotion. Prerequisite: consent of department chairperson. Not for credit if had Business Administration 230; a six-week course.

331 CONSUMER BEHAVIOR**3 sem. hrs.**

Determinants of consumer behavior. Influence of socio-psychological variables on the formation and change of attitudes, consumption and purchasing behavior. Prerequisites: Business Administration 230, 332.

332 MARKETING RESEARCH**3 sem. hrs.**

Research design, specific marketing research procedures, and the research report. Prerequisites: Business Administration 100, 230.

336 INTERNATIONAL MARKETING**3 sem. hrs.**

Managerial problems of world enterprise, with emphasis on the role of ethnic and cultural differences in influencing marketing strategy. Prerequisite: Business Administration 230.

339 MARKETING MANAGEMENT**3 sem. hrs.**

Development and evaluation of the marketing plan. Includes analysis of actual and hypothetical cases. A term project will be included. Prerequisites: Business Administration 100, 230. Not for graduate credit for MBA students.

**340 BUSINESS MANAGEMENT—
FINANCE****1 sem. hr.**

Overview of major finance areas, including sources and utilization of funds, capital budgeting, cost of capital, investment evaluation and money markets. Prerequisite: consent of department chairperson. Not for credit if had Business Administration 240; a six-week course.

341 CAPITAL INVESTMENT DECISIONS**3 sem. hrs.**

Theory of capital management, evaluation of risks, determination of capital structures, measure of costs and return, and allocation of capital. Prerequisite: Business Administration 240.

343 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**3 sem. hrs.**

Advanced evaluation of types of securities; determinants of their value; methods of combining securities in the construction of investment portfolios. Prerequisites: Business Administration 240, 242.

344 INTERNATIONAL FINANCE**3 sem. hrs.**

International payments, structure and functions, international credit markets, investments, and institutions. Prerequisite: Business Administration 240.

351 LIFE AND HEALTH INSURANCE**3 sem. hrs.**

Personal and business risks. Principles of life and health insurance and their applications. Prerequisites: Business Administration 100, 110.

352 PROPERTY AND LIABILITY INSURANCE**3 sem. hrs.**

Application to individuals, business enterprises and governmental institutions. General consideration of risk in fire, marine, bond and casualty areas. Prerequisites: Business Administration 100, 110.

354 RISK MANAGEMENT**3 sem. hrs.**

Management's role in treating nonspeculative risks to which business is exposed. Emphasis on recognition, evaluation, and treatment of risks. Prerequisite: Business Administration 352.

368 BUSINESS SIMULATION**3 sem. hrs.**

Applications of computer simulation techniques to business problems. Emphasis on systems approach to model building, analysis, and interpretation. Prerequisite: BUA 100, ACC 160 or equivalent. Also offered as ACC 368.

401 RESEARCH METHODOLOGY**3 sem. hrs.**

The procedure, techniques and application of research methods in business. Problem analysis, measurement techniques, experimental design considerations and report presentation. Analytical methods, including classical hypothesis testing, nonparametric tests, analysis of variance, linear and multiple regression and multivariate statistics. Prerequisite: Business Administration 100 or equivalent.

412 LEGAL ASPECTS OF BUSINESS DECISIONS**2 sem. hrs.**

Brief consideration of legal reasoning as the developmental process of law, as it relates to business enterprise. Prerequisite: Business Administration 110 or consent of department chairperson.

419 SEMINAR IN QUANTITATIVE METHODS FOR BUSINESS**1-4 sem. hrs.**

Topics will vary with needs and interests of students and faculty. May be taken more than once if different material is covered. Offered irregularly.

420 ORGANIZATION STRUCTURE AND SYSTEMS (formerly BUA 481)**3 sem. hrs.**

Management and organization theory with emphasis on the design of organization structure and systems concepts. Prerequisite: Business Administration 220.

421 ANALYSIS OF ORGANIZATIONAL BEHAVIOR**3 sem. hrs.**

A study of how people in organizations respond to managerial and organizational practices, using a systems orientation to analyze how environmental factors influence organizational practices and climate. Topics include reactions of people to structure and control, problems of motivation and performance, resolution of inter-departmental conflicts, adaptation to change. Prerequisite: Business Administration 220.

425 READINGS IN MANAGEMENT**2 sem. hrs.**

Selected readings from the literature of general management, including recognized classics in the field and other significant contributions of both theoretical and technical nature. Prerequisite: 15 semester hours in Business Administration and/or Accounting.

426 SEMINAR IN MANAGEMENT**3 sem. hrs.**

Significant issues related to the management of people as well as management "functions" or "processes." Topics include: behavioral science and management, employee motivation, leadership, organizational communication, inter-organizational conflict, organization development, change, planning, objectives, control, values, ethics and social responsibility.

430 ADVANCED MARKETING MANAGEMENT**3 sem. hrs.**

Marketing principles, behavioral concepts and quantitative techniques utilized in analyzing marketing problems and decisions. Emphasis on the quantitative aspects of decision-making process and marketing. Prerequisites: Business Administration 100, 230.

431 ADVANCED CONSUMER BEHAVIOR**3 sem. hrs.**

An analysis of psychological, sociological, social psychological, and cultural forces that influence household and industrial purchasing behavior. Emphasis placed on examination of research related to these influencing forces and on the analysis of comprehensive models of consumer behavior. Prerequisite: Business Administration 230.

439 SEMINAR IN MARKETING**1-4 sem. hrs.**

Topics will vary with needs and interests of students and faculty. May be taken more than once if different material is covered. Offered irregularly.

440 FINANCIAL MANAGEMENT**3 sem. hrs.**

Analysis of financial problems of business enterprises and the formulation of financial policies. Financing of current operations and long-term capital needs, income management and expansion policies. Prerequisites: Business Administration 100, 240.

441 ADVANCED FINANCIAL INSTITUTIONS AND MARKETS**3 sem. hrs.**

A critical study of sources of funds and investment management of these funds; scope and changes in financial markets; recent policy changes and problems in financial management of financial institutions; changes being proposed in regulations affecting structure and functions of the intermediaries and the nature of financial markets. Prerequisite: Business Administration 241.

449 SEMINAR IN FINANCE**1-4 sem. hrs.**

Topics will vary with needs and interests of students and faculty. May be taken more than once if different material is covered. Offered irregularly.

471 BEHAVIORAL FOUNDATIONS OF BUSINESS**2 sem. hrs.**

Selected topics in behavioral science and

their application to business and management. Individual, group and organizational considerations in managerial problem-solving and decision-making. For graduate students who lack appropriate preparation in the behavioral sciences. Prerequisite: Consent of department chairperson.

485 BUSINESS PROBLEMS AND POLICY**3 sem. hrs.**

An integration of the major decision-areas in business through the use of complex business cases. Prerequisites: Business Administration 301, 420, 430, 440.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Department of Business Education and Administrative Services

Chairperson of the Department: Warren S. Perry. Office: Stevenson Hall 437.

Teaching Staff: W. Alexander, J. Hall, A. Kaisershot, T. Martin, W. Perry, J. Rich, R. Wray.

Master's Degree Programs in Business Education

The Master's Degree Program in Business Education can lead to the Master of Arts, Master of Science, or the Master of Science in Education degree. A minimum of 32 semester hours and a comprehensive examination are required or the student may elect to take 28 semester hours and do a thesis for four semester hours of credit in Independent Research 499.

All three degree programs require 17 semester hours in business education and up to 15 semester hours in business, education, or cognate courses with the approval of the student's adviser.

No specific elective courses are required for the Master of Science degree. The Master of Science in Education degree requires six of the elective hours in education. The Master of Arts degree requires foreign language reading competency in addition to the required number of semester hours.

ADMISSION REQUIREMENTS

All University and Graduate School requirements for admission to a degree program of the Graduate School at Illinois State University will apply. Graduate students who have been admitted to the University will be admitted to the Master

of Science, Master of Arts, or Master of Science in Education degree program in Business Education only after successfully completing the Graduate Management Admission Test (GMAT).

Before entering the program students will normally have had a Bachelor's degree in Business Education; otherwise, there may be deficiencies. Deficiencies will be determined by the chairperson of the department.

ACADEMIC ADVISER

Students seeking a Master's Degree in Business Education should meet with the department adviser to graduate students prior to enrollment in graduate courses. Individual conferences with the students are continued throughout the graduate program. During the semester or summer term preceding the completion of the degree requirements, the "Plan of Study" required by the Graduate School is prepared jointly with the student and graduate adviser. Assistance is also provided for the degree candidate in preparing for the Comprehensive Examination.

TRANSFER CREDIT

Refer to page 19 for Graduate School policy on transfer of credit.

TIME LIMITATIONS

Refer to page 19 for Graduate School policy on time limitations.

Courses

320 PRACTICUM IN OFFICE PRACTICE INSTRUCTION

2-3 sem. hrs.

For business education teachers teaching office machines or teaching in office education programs. Prerequisite: Business Education 211.

321 PRACTICUM IN DATA PROCESSING

2-3 sem. hrs.

A careers approach to the study of and applications in data processing. Methods and procedures for teaching data processing courses will be included for students planning to teach data processing. Prerequisite: ACC 260.

330 DECISION-MAKING FOR CONSUMERS

3 sem. hrs.

Survey of consumer problems, trends, and information. Topics include: insurance, housing, credit, life-styles, consumer protection, leisure and achieving financial security. Also offered as Home Economics 330.

361 FOUNDATIONS OF BUSINESS EDUCATION

3 sem. hrs.

Historical background and current status of business education emphasizing professional responsibilities of teachers and principles of curriculum construction.

380 ORGANIZATION AND ADMINISTRATION OF VOCATIONAL OFFICE AND DISTRIBUTIVE EDUCATION PROGRAMS

3 sem. hrs.

Planning and organizing a cooperative program; emphasis on recruitment, selection of training stations, student placement, and operation of cooperative plan.

381 DIRECTED OCCUPATIONAL EXPERIENCES FOR OFFICE AND DISTRIBUTIVE EDUCATION

1-4 sem. hrs.

Designed to provide approved on-the-job experiences for credit toward the occupational experience required of office and distributive education coordinators and in-school instructors. Amount of credit to be earned will be determined by previous work experience.

382 COORDINATION TECHNIQUES OF COOPERATIVE OFFICE AND DISTRIBUTIVE EDUCATION PROGRAMS

3 sem. hrs.

Coordination techniques needed for high school and post-secondary teacher coordinators in integrating classroom activities with daily employment.

383 INDIVIDUALIZED INSTRUCTION TECHNIQUES IN VOCATIONAL OFFICE AND DISTRIBUTIVE EDUCATION

3 sem. hrs.

Individualized instructional methods for teaching high school cooperative classes in office and distributive education.

390 IMPROVEMENT OF INSTRUCTION IN BOOKKEEPING AND ACCOUNTING

3 sem. hrs.

Methods of instruction, materials, organization, and presentation of subject matter utilized in teaching of bookkeeping and accounting.

392 IMPROVEMENT OF INSTRUCTION IN BASIC BUSINESS AND CONSUMER EDUCATION

3 sem. hrs.

Methods of instruction, materials, organiza-

tion, and presentation of subject matter utilized in teaching basic business and consumer education.

**394 IMPROVEMENT OF INSTRUCTION
IN TYPEWRITING AND OFFICE
PRACTICE**

3 sem. hrs.

Instructional methods in teaching personal typewriting, vocational typewriting, and clerical office practice.

**395 IMPROVEMENT OF INSTRUCTION
IN SHORTHAND AND
SECRETARIAL PRACTICE**

3 sem. hrs.

Instructional methods in teaching shorthand, transcription, and secretarial office practice.

**402 ADMINISTRATION AND SUPERVISION
OF BUSINESS EDUCATION**

3 sem. hrs.

Concepts and techniques associated with administration of business education programs in high schools and junior colleges.

**406 MEASUREMENT AND EVALUATION
IN BUSINESS EDUCATION**

3 sem. hrs.

Principles underlying measurement and evaluation in business subjects; development and administration of testing programs for business departments.

**408 PROBLEMS OF OFFICE
MANAGEMENT**

3 sem. hrs.

Problems, practices, and policies in office administration. Methods of establishing, analyzing, standardizing, and controlling administrative systems and procedures in the office.

**410 CURRICULUM CONSTRUCTION IN
BUSINESS EDUCATION**

3 sem. hrs.

Principles and practices in curriculum construction and revision as they apply to vocational and non-vocational business education programs.

**420 SEMINAR IN BUSINESS
EDUCATION**

2-3 sem. hrs.

Consideration of business education problems of greatest concern to the group and to the individual students by means of class discussions, presentation of position papers and research findings, group discussions, and individual conferences. May be repeated once for credit with consent of Department Chairperson.

**452 DISTRIBUTIVE EDUCATION IN
THE POST-SECONDARY SCHOOL**

3 sem. hrs.

Organization, curriculum construction, and administration of mid-management distributive education programs in post-secondary schools.

**454 PROBLEMS IN DISTRIBUTIVE
EDUCATION**

3 sem. hrs.

Current problems and research involved in teaching distributive education in programs at the secondary and post-secondary levels.

**491 INTERNSHIP IN COLLEGE TEACHING IN
BUSINESS EDUCATION**

3 sem. hrs.

(See Curriculum and Instruction 491).

**497 INTRODUCTION TO RESEARCH
METHODOLOGY IN BUSINESS
EDUCATION**

3 sem. hrs.

Tools and types of research applicable to business education. Critical evaluation of current research emphasizing application in the improvement of instruction.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Chemistry

Chairperson of the Department: Douglas X. West. Office: Felmley Hall of Science 305.

Teaching Staff: R. Bunting, G. Clark, R. Duty, J. Hansen, J. House, R. Hunt, T. Ichniowski, M. Kurz, D. Paschal, R. Reiter, A. Richardson, B. Ryder, S. Shulman, J. Tsang, E. Waage, D. West.

Master's Degree in Chemistry

The department offers two programs leading to the M.S. degree. One requires a thesis based on original research in chemistry in addition to a core program of courses prescribed by the department.

The other program is designed for students who are not primarily concerned with laboratory research. This program includes a prescribed core program of courses in chemistry augmented by additional course work or independent study in chemistry and/or other areas to meet the needs of the individual and the requirements of the

department. The program may include a thesis.

Courses

The following courses are not generally applicable to an advanced degree in chemistry: 301, 302, 311, 360, 361, 362, 363.

308 CHEMICAL LITERATURE

1 sem. hrs.

Chemical literature in journals, handbooks, abstracts, monographs, and patents. Problems requiring literature searches in all fields of chemistry. Prerequisite: 20 hrs. of CHE.

315 ANALYTICAL CHEMISTRY

3 sem. hrs.

Emphasis on modern instrumental methods of chemical analysis including electroanalytical, optical and chromatographic methods. Preseq-uisite: CHE 362 or conc reg or consent of instruc-tor. Lecture and laboratory. Locker charge of \$2.

323 QUALITATIVE ORGANIC ANALYSIS

3 sem. hrs.

Identification of organic compounds with emphasis on modern spectrometric methods. Prerequisite: CHE 233. Lecture and laboratory. Locker charge of \$2.

325 MODERN METHODS AND TECH-NIQUES IN ORGANIC CHEMISTRY

2 or 3 sem. hrs.

Modern laboratory techniques associated with synthesis, quantitative analyses, distillations and chromatography. Organic literature searches will be stressed. Prerequisite: CHE 233 or con-sent of department chairperson. Locker charge of \$2.

342 GENERAL BIOCHEMISTRY I

3 sem. hrs.

Survey of the chemical and physical proper-ties of amino acids, carbohydrates, lipids and nucleic acids, and structure and function of pro-teins, including enzyme kinetics. Prerequisite: CHE 232 or one year of organic chemistry. Not for credit if had CHE 242.

343 BIOCHEMISTRY LABORATORY

3 sem. hrs.

Application of biochemical principles and methods discussed in companion course, CHE 342. Prerequisite CHE 342 or conc reg or CHE 242 and consent of instructor. Lecture and labora-tory. Locker charge of \$2.

344 GENERAL BIOCHEMISTRY II

3 sem. hrs.

A survey of important aspects of intermedi-

ary metabolism, metabolic regulation, membrane transport and bioenergetics. Topics will include hormonal controls and immuno-chemical re-sponse. Prerequisite: CHE 342 or CHE 242 and consent of instructor.

350 INORGANIC CHEMISTRY

3 sem. hrs.

Survey of modern inorganic chemistry in-cluding structure of inorganic compounds, coordination chemistry, non-aqueous solvents and selected inorganic reactions. Prerequisite: CHE 362 or consent of instructor.

351 INORGANIC PREPARATIONS

2 sem. hrs.

Preparation of typical inorganic compounds illustrating special and advanced techniques. Prerequisite: CHE 350 or conc. reg. Locker charge of \$2.

358 RADIOCHEMISTRY

2 sem. hrs.

Survey of nuclear models, theories, and decay schemes. Application of radiochemical methods to elucidation of reaction mechanisms and molec-ular structure. Prerequisite: CHE 362.

380 TOPICS IN CONTEMPORARY CHEMISTRY

1-3 sem. hrs.

New concepts and recent developments in the fields of organic, inorganic, analytical, physical and biochemistry. Prerequisite: Consent of instructor. May be repeated.

404 ELECTRONICS FOR SCIENTISTS

3 sem. hrs.

Circuits of scientific instruments, electronic principles, servo systems, comparison measurements, operational amplifiers, feedback control, digital circuits, transistors, and vacuum tube cir-cuits. Prerequisite: Chemistry 315 or graduate status in physics.

410 ADVANCED ANALYTICAL METHODS

3 sem. hrs.

Advanced study of selected areas of chemical analysis with special emphasis given to fundamental principles and applications to related disciplines. Prerequisite: Chemistry 315 or con-sent of instructor.

412 TOPICS IN ANALYTICAL CHEMISTRY

1-3 sem. hrs.

Advanced study in selected areas of modern analytical chemistry. Course may be repeated for credit. Prerequisite: Chemistry 315 or consent of instructor.

420 ADVANCED ORGANIC CHEMISTRY**3 sem. hrs.**

An advanced study of organic chemistry with emphasis on stereoisomerism, conformational analysis, resonance, synthesis, elucidation of structure, heterocyclic and natural products chemistry. Prerequisite: Chemistry 232 or equivalent.

422 MECHANISMS IN ORGANIC CHEMISTRY**3 sem. hrs.**

A critical examination of nucleophilic, electrophilic and free radical reaction mechanisms including the study of the stability and reactivity of carbanions, carbonium ions and carbenes. Prerequisites: Chemistry 232 and credit or registration in 360.

424 TOPICS IN ORGANIC CHEMISTRY**1-3 sem. hrs.**

Lectures in selected topics of modern organic chemistry. Course may be repeated for credit. Prerequisite: Organic Chemistry 232 or equivalent.

440 TOPICS IN BIOCHEMISTRY**1-3 sem. hrs.**

Advanced study in selected areas of biochemistry. May be repeated for credit in consecutive semesters as different topics are introduced. Prerequisite: One year of biochemistry or consent of instructor.

450 ADVANCED INORGANIC CHEMISTRY**3 sem. hrs.**

Interpretation of contemporary theories and their application to selected areas of molecular structure and reaction dynamics in inorganic systems.

452 PHYSICAL INORGANIC CHEMISTRY**3 sem. hrs.**

Study of theoretical factors related to the properties of matter, including symmetry elements, group theory, and the application of various instrumental techniques to the study of the structure of inorganic compounds. Prerequisites: Chemistry 315 and either 350 or 450.

454 TOPICS IN INORGANIC CHEMISTRY**1-3 sem. hrs.**

Advanced study in selected areas of modern inorganic chemistry. Course may be repeated for credit. Prerequisite: Chemistry 350 or consent of instructor.

460 QUANTUM CHEMISTRY**3 sem. hrs.**

An introduction to the methods of obtaining exact and approximate solutions to the Schrödinger equation, and the use of these solutions in the description of atomic and molecular systems. Prerequisites: Chemistry 362 and Mathematics 175, or consent of instructor. Mathematics 340 is also recommended.

462 INTRODUCTION TO STATISTICAL THERMODYNAMICS**3 sem. hrs.**

An introduction to the methods and theorems of statistical mechanics, its relationship to chemical thermodynamics, and applications to molecular models of chemical interest. Prerequisite: Chemistry 362 or consent of instructor.

464 CHEMICAL KINETICS**2 sem. hrs.**

The collection and interpretation of data on chemical kinetics and the application of the results to the determination of the mechanisms of chemical reactions. Prerequisite: Chemistry 362 or consent of instructor.

466 TOPICS IN PHYSICAL CHEMISTRY**1-3 sem. hrs.**

Advanced study in selected areas of modern physical chemistry. Course may be repeated for credit. Prerequisite: Chemistry 362 or consent of instructor.

490 RESEARCH IN CHEMISTRY**Variable credit**

Research involving the gathering of data to form the basis for the thesis. Open only to advanced graduate students. The course can be repeated for credit. Approval of the chairperson of the department is required.

491 INTERNSHIP-SEMINAR IN COLLEGE TEACHING IN CHEMISTRY**3 sem. hrs.**

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

492 SEMINAR IN CHEMISTRY**1 sem. hr.**

Survey of current work in chemistry both in pure research and in the application of newer theories of chemistry to the teaching of chemistry on the secondary and college levels. May be repeated for a total of two semester hours.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Auxiliary Courses

Not applicable to an advanced degree in chemistry.

301 TEACHING OF CHEMISTRY

3 sem. hrs.

Modern methods and problems confronting teachers of Chemistry. Involves study of CBA, CHEMS, and regular high school chemistry. Prerequisite: 20 hours of CHE. For teaching major only.

302 INDUSTRIAL CHEMISTRY

3 sem. hrs.

Scientific aspects of community and industrial problems. Prerequisite: 22 hours of CHE. Includes trips to industries and research labs.

311 LABORATORY INSTRUMENTATION

3 sem. hrs.

Instruments used in chemical analysis. Applications to qualitative and quantitative analyses. Prerequisite: 10 hrs. of CHE. Not for credit maj. — see CHE 315. Lecture and laboratory. Locker charge of \$2.

360 PHYSICAL CHEMISTRY I

3 sem. hrs.

First of a series of theoretical chemistry dealing with descriptions of gases, liquids, solutions, thermochemistry, thermodynamics, chemical and phase equilibrium, kinetic theory, and chemical kinetics. Prerequisites: CHE 141 or 150; PHY 109 or 111; 8 hrs. of CHE or PHY courses numbered 200 or higher; MAT 116 or 136.

361 PHYSICAL CHEMISTRY

LABORATORY

1 sem. hr.

Laboratory applications of principles treated in physical chemistry. Prerequisite: CHE 360 or conc reg. Locker charge of \$2.

362 PHYSICAL CHEMISTRY II

3 sem. hrs.

Continuation of CHE 360, including ionic equilibrium, conductance, electromotive force, spectroscopy, molecular theory, and miscellaneous applications of quantum theory. Prerequisite: 360.

363 PHYSICAL CHEMISTRY

LABORATORY II

1 sem. hr.

Laboratory studies of the derivations and applications of principles treated in physical chemistry. Prerequisite: CHE 362 or conc reg. One three-hour laboratory period per week. Locker charge of \$2.

Economics

Chairperson of the Department: James V. Koch. Office: Schroeder 338.

Teaching Staff: R. Cebula, J. Chizmar, F. Firestone, W. Harden, M. Hassan, L. Hiebert, J. Koch, G. S. Laumas, B. McCarney, T. Monson, V. Owen, D. Ramsey.

Master's Degree in Economics

The Department of Economics offers work leading to the M.A. or M.S. degree. The student will ordinarily be expected to write a thesis for which four to six hours of credit will be given. If the student can demonstrate to the satisfaction of the Department chairperson that substantive writing in the discipline already has been done, the student may elect to take 32 semester hours of course work and write a comprehensive examination in lieu of the thesis. Economics 438, 440 and 441 are required of all master's degree candidates.

Admission to the program without course deficiencies requires that the student present Economics 100, 101, 130, 131, 340, and 341, or equivalents. Economics 340 and 341 may not be presented for graduate credit by a master's degree candidate in Economics.

Doctor of Arts

The Doctor of Arts in Economics is designed to provide advanced practitioner training to individuals for the purpose of improved instructional and curricular development capabilities for undergraduate division courses in economics in two and four-year institutions of higher education. Entry into the program ordinarily requires a master's degree or equivalent and previously successful professional experience in teaching. Each doctoral student is required to pass written comprehensive examinations in the economics core courses and one or two fields within economics. Each student, in consultation with his adviser, will select minor field(s) consisting of no more than two areas outside economics in which at least two courses in each area ordinarily will be completed. The program requires a Professional Studies in Higher Education component co-ordinated by the Department of Curriculum and Instruction. The program also requires a Seminar and Practicum in the Teaching of Economics. A preliminary oral examination follows completion of all course work.

The final requirement of the program is a dissertation focusing on the teaching of economics and/or curricular developments which demonstrate a combination of scholarly, analytical, creative and expository skills. The normal residence requirement is one year, but commuter students who demonstrate continuing

Curriculum and Instruction

(See Education)

progress in the program may have the residence requirement reduced to one semester. The student will be expected to fulfill all the requirements of the Graduate School. For additional information and a full statement of requirements, write the Chairperson, Department of Economics, Illinois State University.

Courses

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

An intensive study of particular lands, environments, cultures and peoples. May be given in cooperation with other departments on or off campus. The areas to be studied, participating departments, and credit hours available in the several departments, will be announced each time the course is offered.

310 DEMOGRAPHIC ECONOMICS

3 sem. hrs.

Theoretical and empirical study of the economics of population changes, distributions, and characteristics. Population dynamics, policy issues, and economic consequences. Prerequisite: Economics 101.

320 INDUSTRIAL ORGANIZATION AND PRICES

3 sem. hrs.

A theoretical and empirical analysis of the basic influences on industrial markets and performance. Market practices, the role of competition and related policy issues. Prerequisite: Economics 101.

326 ECONOMICS OF HUMAN RESOURCES (Formerly MANPOWER ECONOMICS)

3 sem. hrs.

Theoretical and empirical analysis of labor markets. Education and training, labor mobility, wage structure, discrimination, unemployment, wage and income policies. Prerequisite: Economics 101.

330 MATHEMATICAL ECONOMICS

3 sem. hrs.

Quantitative techniques as they are applied to business and economic problems. Covers integral calculus, difference equations, differential equations and linear programming in relation to economic theory. Prerequisite: Economics 101 and course work in differential and integral calculus.

331 INTERMEDIATE ECONOMIC STATISTICS

3 sem. hrs.

Intermediate level probability and sampling theory. Hypothesis testing. Estimation. Basic econometric principles. Use of common regression packages such as ESP. Prerequisites: Economics 131 and coursework in differential and integral calculus.

333 OPERATIONS RESEARCH

3 sem. hrs.

Quantitative techniques for economics analysis and decision making. Includes linear programming, input-output analysis, game theory, queuing theory, and probabilistic models, with emphasis on applications to theory of the firm. Prerequisites: Economics 131 and course work in differential and integral calculus.

335 ECONOMICS OF TRANSPORTATION

AND PUBLIC UTILITIES

(formerly TRANSPORTATION)

3 sem. hrs.

An analysis of contemporary issues in transportation of public utilities, with emphasis on the impact of regulation. Prerequisite: Economics 101.

339 MANAGERIAL ECONOMICS

3 sem. hrs.

Theoretical and applied study of demand, costs, and production related to the theory of the firm. Developments of current interest; empirical studies intended to affirm or disaffirm applicability of economic principles. Prerequisite: Economics 101.

340 INTERMEDIATE MICROECONOMIC THEORY

3 sem. hrs.

Emphasis on topics regarding resource allocation, scarcity, and distribution of income; theory of consumer choice, theory of the firm, market structures, factor markets, distribution of income, welfare economics and general equilibrium. Prerequisite: Economics 101.

341 INTERMEDIATE MACROECONOMIC THEORY

3 sem. hrs.

Theory of income, employment, interest rate and price level determination. The government's influence on these variables via monetary and fiscal policies. Prerequisite: Economics 101.

345 INTERNATIONAL ECONOMICS

3 sem. hrs.

Basic aspects of the international economy as the reasons for trade, the terms of trade, and

the adjustments necessary to achieve the highest possible plane of living, as well as balance of payments and exchange theory. Contemporary applications such as exchange crises, trade barriers, and the links between trade and development. Prerequisite: Economics 101.

350 PUBLIC FINANCE

3 sem. hrs.

Economic role of government in the economy. Analysis of the economic impacts of government expenditures and taxes on the allocation of resources, the distribution of income, employment, prices and economic growth. Prerequisite: Economics 101.

351 STATE AND LOCAL FINANCE

3 sem. hrs.

Economic impacts of state and local tax and expenditure programs, intergovernmental fiscal relations and problems of metropolitan areas. Prerequisite: Economics 101 or consent of instructor. Formerly Economics 451.

355 ENVIRONMENTAL ECONOMICS

3 sem. hrs.

Theoretical and empirical analysis of environmental pollution generation and of corrective policies. Emphasis upon the resource allocation implications of public policy decisions. Prerequisite: Economics 101.

360 QUANTITATIVE ECONOMIC HISTORY

3 sem. hrs.

Recent empirical studies and applications of economic theory to historical problems in an American context. Prerequisite: Economics 101.

372 HISTORY OF ECONOMIC THOUGHT

3 sem. hrs.

A study of economic analysis from the Mercantilists to the American Institutionalists. Relates earlier schools of thought to the contemporary. Prerequisite: Economics 101.

401 SURVEY OF ECONOMIC PRINCIPLES

3 sem. hrs.

For mature students who need an understanding of the basic tools of economic analysis. Compresses into a single semester matters ordinarily covered in two semesters of Economic Principles. Enrollment is limited to graduate students who have had no more than one semester of previous study in economics.

402 CONCEPTS, METHODS AND MATERIALS FOR IMPLEMENTING ECONOMICS EDUCATION

3 sem. hrs.

This workshop synthesizes basic concepts, methods, and materials for implementing Eco-

nomic Education in the K-12 Grade levels. Not open to Economic majors and minors.

405 THEORIES OF ECONOMIC DEVELOPMENT

3 sem. hrs.

Consideration of economic development theories and their implications for development policy to further economic growth. Prerequisite: Economics 205 or equivalent.

409 ECONOMIC ISSUES IN SOCIALIST ECONOMIES

3 sem. hrs.

Topics covered include the labor theory of value, surplus value, theories of rent, expanded reproduction, economic laws in capitalism and socialism, socialist pricing, centralized and decentralized planning, problems of measurement, the new class phenomenon, and criticisms of socialist concepts. Prerequisite: Economic 213 or equivalent.

410 SOVIET ECONOMICS

3 sem. hrs.

Economic growth of the Soviet Union. NEP and economic planning. Examination of particular sectors of the Soviet economy. Pricing, decentralization and economic reform. Prerequisite: Economics 101.

415 MONETARY ECONOMICS

3 sem. hrs.

The role of money in economic activity; the precise nature of the demand and supply conditions; the policy implications of theoretical conclusions with regard to money. Prerequisite: Economics 341 or equivalent.

416 STABILIZATION THEORY AND POLICY

3 sem. hrs.

Theory of economic policy, impacts of monetary and fiscal policies on employment and price levels, interest rates, growth, and balance of payments, implementation and coordination problems of monetary and fiscal policies. Prerequisite: Economics 341 or equivalent.

435 TOPICS IN TRANSPORT AND PUBLIC UTILITY PRICING

3 sem. hrs.

Prerequisite: Economics 335 or 320.

438 ECONOMETRICS

3 sem. hrs.

Study of the linear regression model, properties of estimators, simultaneous equations, and specification and identification in economic theory and economic problems. Prerequisite: Economics 331, Mathematics 350, or consent of instructor.

439 ECONOMETRICS II**3 sem. hrs.**

Advanced topics in Econometrics, including modeling, simultaneous equations, Monte Carlo methods, spectral analysis. Fall only. Prerequisite: Economics 438.

440 ADVANCED MICROECONOMIC THEORY I**3 sem. hrs.**

The theory of the firm, the consumer and the resource owner and the determination of prices under alternative market structures. Prerequisite: Intermediate Microeconomic Theory 340 and work in the calculus.

441 ADVANCED MACROECONOMIC THEORY I**3 sem. hrs.**

National income analysis with emphasis on the contemporary theories of consumption, investment and interest, also consideration of the level, growth and fluctuations of national income. Prerequisite: Intermediate Macroeconomic Theory 341 and work in the calculus.

445 INTERNATIONAL ECONOMIC ANALYSIS**3 sem. hrs.**

In depth examination of issues from pure theory of trade and international finance with special emphasis on the international economy as a dynamic system. Growth and trade, balance of payments adjustment, and the theory of exchange rate determination are considered. Prerequisite: Economics 345.

450 ADVANCED PUBLIC FINANCE**3 sem. hrs.**

Expenditure theories, cost-benefit analysis, tax incidence, welfare economics of public finance, and technical problems of income, sales, profit, and property taxes. Prerequisite: Economics 340 or equivalent.

470 THE PUBLIC FINANCE OF HIGHER EDUCATION**3 sem. hrs.**

An investigation of topics and problems in the public finance of higher education. Topics will vary each semester, but the following will usually be covered: revenue policy and expenditure policy for higher education, program and performance budgeting and other efficiency concerns, investment in education and national economic growth, aspects of the business management of higher education. Course is cross-listed as Educational Administration 470. Prerequisite: Educational Administration 479, Economics 401 or permission of instructor.

490 SEMINAR IN ECONOMICS**1-4 sem. hrs.****491 INTERNSHIP IN COLLEGE TEACHING IN ECONOMICS****3 sem. hrs.**

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

492 GRADUATE READINGS IN ECONOMICS**1-3 sem. hrs.**

For the graduate student who would benefit from a more specialized independent type of study adapted to his background and needs. To be taken by permission of the chairperson of the department and the instructor involved.

497 INTRODUCTION TO RESEARCH**METHODOLOGY****1-6 sem. hrs.**

An examination of bibliography, the sources and uses of research data, and the methodology of scholarly research in Economics.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

540 ADVANCED MICROECONOMIC THEORY II**3 sem. hrs.**

Advanced topics in consumption and production theory, uncertainty, general equilibrium, and welfare economics. Prerequisite: Economics 330 and 440.

541 ADVANCED MACROECONOMIC THEORY II**3 sem hrs.**

Extensions and refinements of basic static macro models and related empirical studies; growth models, disequilibrium macro models and introduction to dynamic macro models. Prerequisite: Economics 330 and 441.

599 RESEARCH IN ECONOMICS**Variable Credit**

Research involving the gathering of data to form the basis of the dissertation required for the Doctor of Arts.

Education**Clinical Experiences and Admission-Retention in Teacher Education**

Director: Louise E. Dieterle, 309 DeGarmo Hall.

Teaching Staff: Curtino, Litchfield, Salome

Student Teaching**399 STUDENT TEACHING**

(or C&I 253 for elementary education majors)
1-10 sem. hrs.

Graduate students who wish to do their Student Teaching must be admitted to a Teacher

Education program a minimum of one semester prior to being assigned to do their student teaching.

To be eligible to do student teaching, a Graduate Student must meet all of the following requirements before being assigned to do student teaching:

1. Be formally admitted to an approved teacher education program of the University at least one semester prior to being assigned to do his/her student teaching.

2. Have completed 15 semester hours of work at Illinois State University.

3. Have completed satisfactorily all the professional education courses required in the specific sequence: elementary, junior high school, secondary, special education, early childhood education. Specific information related to the professional education courses that must be completed before assignment is made to student teaching is available in the Office of Clinical Experiences and Admission-Retention in Teacher Education.

4. Have earned at least a 2.2 grade point average at the time of application for student teaching and at the time of entry into student teaching in: (a) all work taken at Illinois State University, and (b) all work taken at Illinois State University in the major field.

5. Have secured a statement from the University Health Service indicating that he/she is physically capable of meeting the requirements of a regularly certified teacher.

6. Have filed an application for student teaching for a given semester with the Director of Clinical Experiences at least six months prior to the semester in which the student teaching is planned.

7. Have been approved for student teaching by the chairperson of the department of the student's major and by the Director of Clinical Experiences.

Curriculum and Instruction

Chairperson of the Department: Thelbert L. Drake. Office: DeGarmo Hall 232.

Teaching Staff: G. Baer, R. Baker, F. Belshe, M. Berson, A. Bjork, S. Blankenship, F. Bowen, S. Bray, L. Brown, L. Brubaker, C. Bunke, J. Cantlon, J. Carlock, R. Clack, R. Conyne, J. Crotts, T. Drake, L. Eastman, C. Edwards, T. Edwards, R. Eiben, J. Ewing, R. Fisher, T. Fitch, W. Frinsko, W. Galler, J. Goeldi, S. Goldberg, R. Goodall, I. Grief, R. Halinski, G. Heath, C. Hicklin, Q. Hrudka, M. Huser, E. Irving, H. Jones, D. Kachur, L. Kennedy, F. Lewis, D. Livers, M. Lorber, N. Madore, R. Meyering, M. Miller, W. Miller, A. Milliren, R. Moore, W. Pierce, D.

Rhodes, V. Schnepf, C. Sherman, A. Slan, H. Stern, F. Taylor, M. Toney, W. Venerable, M. Waimon, R. Youngs, W. Zeller.

Programs Offered

Master's programs with advisement in the Department of Curriculum and Instruction are offered in Counselor Education, Elementary Education, Reading, Secondary Education, and Supervision. University requirements for master's degrees are given elsewhere in this catalog. A student may elect one of three alternate plans for each of the degree programs. One may elect to do 32 hours of course work including a thesis for which the student may receive from four to six hours of credit in 499, or elect to do 32 hours of course work and take a comprehensive examination, or elect to do 39 hours of course work not including a thesis or a comprehensive examination. Specific course requirements are listed under the various programs.

Counselor Education

A student may work toward a Master of Arts, a Master of Science, or a Master of Science in Education degree by fulfilling the requirements specified in this catalog. A student in Counselor Education passes through a four stage, sequential program. The requirements for each stage are summarized below:

A. Conditional Admission Phase

1. 12 hours of undergraduate work in the Behavioral Sciences — Psychology, Sociology, Anthropology, Economics, etc.

2. 3.0 G.P.A. for the last 60 undergraduate hours.

3. Completion of a self-inventory provided by the Counselor Education area.

B. Admission to Candidacy Phase

1. 3.25 for 12 hours of graduate work.

2. Satisfactory scores on Miller Analogies Test.

3. Competencies achieved in Curriculum and Instruction 362 and 463, and one elective Counselor Education course.

4. B or better in Psychology 420.

C. Pre-practicum Phase

1. Competencies achieved in Curriculum and Instruction 464, 467, or equivalent.

2. Completion of a minimum of one course in area of specialization.

3. B or better in Curriculum and Instruction 460 and 465, or equivalent.

4. Completion of Curriculum and Instruction 497 or 340 or equivalent.

D. Practicum Phase

1. B or better in Curriculum and Instruc-

tion 462 and 463.01.

2. Completion of at least one contemporary topics course in Counselor Education.

A student not achieving the requirements for a particular phase will be given an opportunity to repeat the course or the competency so that the desired level is reached. Students are reminded that when courses are repeated previous grades earned become a part of the student's graduate record and grade average. Additional courses are selected following recommendations of the adviser and following state requirements for certification for the areas of specialization:

A. Elementary School Counseling. Prepares counselors for elementary and junior high schools. Persons completing this program ordinarily will be eligible for the Special Certificate in Guidance in the State of Illinois.

B. Secondary School Counseling. Prepares counselors for secondary schools. Persons completing this program ordinarily will be eligible for the Special Certificate in Guidance in the State of Illinois.

C. Counseling in Higher Education. Prepares counselor for junior and senior colleges, and other counseling oriented positions in higher education.

Elementary Education

A student may work toward a Master of Arts, a Master of Science, or a Master of Science in Education degree by fulfilling the requirements specified in this catalog. The following three alternative programs are available in which electives, through advisement may be taken in related areas of specialization listed below.

Alternative I is a 32 semester hour program requiring 26-28 hours in course work plus four to six hours for thesis credit. A minimum of 12 semester hours in education is required, including Curriculum and Instruction 403, 497, 476 and three hours selected under advisement.

Alternative II is a 32 semester hour program and a comprehensive examination. Course requirements are the same as Option I.

Alternative III is a 39 semester hour program applicable to the Master of Science in Education degree. A minimum of 16 semester hours in education are required including Curriculum and Instruction 403, 497, 476, 479, and 496. Curriculum and Instruction 496 is required after the student has completed 27-30 semester hours. Students may elect to pursue a series of courses in bilingual/bi-cultural education leading to certification endorsement.

Area Specializations:

Academic Field: Students may elect to pursue a study concentration within an academic discipline. Advisement appropriate to the area of study will be provided.

Early Childhood Education: Students may elect to pursue a specialization in early childhood education relative to career objectives.

Elementary Curriculum: Students interested in curriculum and curriculum theory and development are advised to pursue an emphasis in this area. Especially recommended for students planning to become curriculum specialists, and teaching team leaders.

Reading: The student should take 15-18 hours of reading, under advisement.

Preparation to Teach: Students with an earned degree in a field other than Elementary Education may pursue a graduate program of studies designed to prepare the student for teaching at the Elementary Level. The certification requirements will usually be satisfied through this program.

Urban Education: Special program alternatives are available for those students who wish to declare special career interests in urban education.

Reading

Requirements for a Master of Science in Education with specialization in reading will vary somewhat depending upon the area or level of reading in which the graduate student plans to concentrate. However, all students are expected to have a common base of knowledge about reading processes, diagnosing reading abilities and providing desirable programs in reading.

Students who elect an M.S. in Education with a specialization in reading will be required to have a minimum of one undergraduate course in reading.

All students in the reading program will be expected to complete successfully at least one reading practicum. Assignment of academic advisement of students will depend on their selection from among the following areas of concentration:

A. Remedial Reading. Major emphasis upon diagnosis and educational accommodation of special cases of severe reading disability.

B. Elementary School Reading. Emphasis upon the roles of teachers and reading consul-

tants in developmental reading programs for elementary education.

C. General, Secondary, and Higher Education

Reading. Developmental programs and general functions of reading specialists or consultants and the kinds of services provided in general, secondary, or higher education.

The following courses are required in each of the above areas:

1. Curriculum and Instruction 475, 476, and one course in history, philosophy, or social foundations of education.

2. 18 semester hours of study from among the following reading courses as advised: Curriculum and Instruction 303, 306, 307, 308, 350, 401, 402, 406, 407, 408, 419, 420, and other classroom diagnostic courses in reading.

Other courses, workshops, etc., in reading may be used to fulfill the requirements in No. 3 below, but they **cannot** be used to substitute for the courses listed above.

3. Additional courses to complete the program requirements as advised.

Secondary Education*

This individualized program is intended primarily for persons who are currently teaching or have had teaching experience. An adviser from the Department of Curriculum and Instruction, in consultation with advisers from the teaching fields, will assist in designing a program based upon particular backgrounds, interests, and needs. Courses or other learning experiences will be selected on the basis of previous course work, professional experience, tests of skills and knowledge, and professional goals.

Admission Requirements:

1. Certification to teach.
2. 3.0 G.P.A. for the last 60 semester hours of undergraduate work.

3. 3.2 G.P.A. in any graduate work taken prior to application for admission.

4. Scores on selected tests of English language usage may be required.

Program Requirements:

The 32-hour option with a thesis and the 32-hour option with a comprehensive examination will include at least 12 hours of work in professional education and at least 12 hours in one or more of the academic departments. The remaining hours will be electives and may be taken in either professional education or the teaching field(s).

The 39-hour option will include a three-hour culminating experience. It may be initiated in the course, Introduction to Research, with assistance of the adviser. The course C&I 495 or C&I 580 could serve as the vehicles for the culminating experience, which could result in a research report, a course of study, a teaching manual, or other product acceptable to the instructors of the two courses. It is a project which should be worked on throughout much of the program and should combine theory and practice.

A. Teaching Field(s) 12 semester hours.

B. Professional Education 12 semester hours.

Three hours in area one, three hours in area two, and three hours in each of two of the other three areas.

1. C&I 437, 476, 481, 495, 580
2. C&I 340, 490, 497
3. C&I 328, 330, 335, 342, SOA 350, 369, PSY 360, 416
4. C&I 333, 389.96, 393.04, PSY 302
5. C&I 347, 389.53, 393.01, 477, EDA 487

Other courses may be taken through prior approval of the major adviser.

C. Culminating Experience 3 semester hours (39 hour option only).

D. Electives up to 12 semester hours depending on the option taken.

* Application for National Council for Accreditation of Teacher Education approval is being made.

Supervision

(1) FOR PERSONS DESIRING CERTIFICATION

While courses and advisement in this field fall mainly in the Department of Curriculum and Instruction, students may be assigned to advisers in other departments for study for supervision in special areas.

The following courses are required in the Supervision curriculum, regardless of the specialization: Curriculum and Instruction 387, 437, 497, 476, 477, 478, and Educational Administration 481.

A graduate course is also required for all candidates in the Supervision curriculum from one of the following fields: History of Education, Philosophy of Education, or Social Foundations of Education.

If specialization is in Elementary Supervision, the additional course, Curriculum and Instruction 403, is required.

If specialization is in the Supervision of Student Teaching, the additional course Curriculum and Instruction 475, is required.

Additional courses are to be selected following recommendation of adviser. Such courses may include those to be taken in other departments.

Students entering this curriculum should hold a teaching certificate. Students without teaching experience may be admitted to the program but will be expected to obtain such experience prior to admission to candidacy for the degree.

Persons completing this program ordinarily will be eligible for a supervisory certificate in the State of Illinois.

(2) FOR PERSONS NOT DESIRING CERTIFICATION

If a person outside the field of professional education has a need for a program in supervision but does not need certification, an individualized program can be designed to meet the needs. The student will be advised in the Department of Curriculum and Instruction but with close consultation with one or more people in other departments where the student may desire to do a considerable amount of his academic work.

Courses

300 EDUCATIONAL ROLE OF PLAY IN EARLY CHILDHOOD

3 sem. hrs.

Emphasizes the process of play and its relationship to personal and cognitive development during the first eight years of life. Historical and current theories of play. Participation experiences required. Prerequisite: Conc reg in C&I 250 or junior standing.

301 PREKINDERGARTEN EDUCATION — PRINCIPLES AND PRACTICES

3 sem. hrs.

Principles and practices of planning, teaching, and evaluating prekindergarten program. Emphasizes living-learning experiences, activities, materials, and equipment appropriate for children in prekindergarten environments. Participation experiences required. Prerequisite: C&I 300.

302 PROSPECTUS IN ELEMENTARY EDUCATION

3 sem. hrs.

The evolution of elementary education including its role in contemporary society. No credit if in Elementary Education Core Program.

303 PRACTICUM IN UNIVERSITY READING

STUDY CENTER

3 sem. hrs.

Observation and participation to provide skills necessary for working in a reading-study center in high school, junior college and senior college. Prerequisite: C&I 218 or reading portion of 200 or 307 and consent of instructor. Six hours each week.

304 COLLOQUIUM: MUSIC, ART, AND PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL

3 sem. hrs.

306 READING DEVELOPMENT FOR EARLY ADOLESCENCE

3 sem. hrs.

Provides the junior high/middle school person with knowledge, skills, and abilities to work with the developmental reading growth of early adolescents. A practicum experience is provided.

307 ADVANCED READING METHODS

3 sem. hrs.

Practical problems utilizing group techniques in teaching reading in elementary classroom. Integrates reading with non-reading learning activities. Prerequisite: C&I 220 or 251 or consent of instructor.

308 TEACHING ADULTS TO READ

3 sem. hrs.

Nature and needs of the population of reading programs for adults. Goals, techniques, content, and materials. Prerequisite: one course in teaching of reading.

309 ADULT EDUCATION PROGRAMS

3 sem. hrs.

Instruction, direction, and administration of public school adult education. The adult learner needs and characteristics; facilities, staff, supervision and administration of adult education programs.

310 ELEMENTARY SCHOOL CURRICULUM

4 sem. hrs.

Conceptual and structural design of elementary school curriculum. Prerequisites: C&I 270, 280, or 290; or consent of instructor.

311 TEACHING IN URBAN ELEMENTARY SCHOOLS

3 sem. hrs.

Processes and effects of urbanization on elementary school children; adaptation of curriculum materials, techniques, procedures, and practices for teaching in urban elementary schools.

312 URBAN FIELD EXPERIENCE**3 or 6 sem. hrs.**

An off-campus, community-based experience in urban schools, local community agencies and state and private institutions serving youth.

318 SCHOOL/COMMUNITY INVOLVEMENT**2-6 sem. hrs.**

Direct involvement with community programs and agencies. Student assumes the role of a volunteer participant under the guidance and supervision of a professor and a designated agency representative. Prerequisites: Conc reg req. C&I 253 and consent of center director.

324 SELECTED TOPICS IN THE HISTORY OF EDUCATION**1-3 sem. hrs.**

Prerequisite: C&I 335 or Upper-Level HIS course or consent of instructor. May be repeated.

326 SELECTED TOPICS IN THE PHILOSOPHY OF EDUCATION**1-3 sem. hrs.**

Prerequisite: C&I 231 or Upper Level PHI course or consent of instructor. May be repeated.

328 THE SCHOOL AS A SOCIAL INSTITUTION**3 sem. hrs.**

Utilization of social scientific concepts in the study of education. Emphasis on organization and functions of the school as a social institution. Prerequisite: Completion of University Studies Group D requirements or consent of instructor.

330 MAN AND THE ANALYSIS OF EDUCATION**3 sem. hrs.**

Fundamental dimensions of foundational inquiry; historical, philosophical, social, and comparative foundations of education. Emphasis on relationship between selected views of man and their implications for education.

331 HISTORY AND PHILOSOPHY OF EARLY CHILDHOOD EDUCATION**3 sem. hrs.**

Emphasis given to major events and theories having an impact on Early Childhood Education in its contemporary form. Visitations required. Prerequisite: C&I 300 or 301.

332 EDUCATION IN THE INNER CITY**3 sem. hrs.**

Problems of educating students living in inner city. Student characteristics, needed teacher skills and attitudes, instructional materials, techniques, school and community programs. Prerequisite: C&I 270 or 280 or appropriate portion C&I 200. Field trips.

333 THE JUNIOR HIGH SCHOOL**2 sem. hrs.**

Philosophy, functions, curricula of early adolescent education as implemented in junior high/middle schools. Relationships between pupils' developmental characteristics, needs, and behaviors and development of school programs. Problems, issues, evaluation and accreditation of junior high/middle schools.

335 HISTORY OF EDUCATION**3 sem. hrs.**

Development of European and American educational systems and programs. Historical perspective of modern educational problems.

336 INTRODUCTION TO COMPARATIVE EDUCATION**3 sem. hrs.**

Comparative analysis of major ideas and institutions of selected national systems of education. Problems related to developments in American education.

340 STATISTICS I**3 sem. hrs.**

Application and interpretation of basic statistics used in the behavioral sciences: Descriptive statistics, simple hypothesis testing and two-variable regression. Prerequisite: PSY 111 or SOA 106. Also offered as SOA 340 and PSY 340.

347 TEACHER'S ROLE IN CHILD, FAMILY, AND COMMUNITY RELATIONSHIPS**3 sem. hrs.**

Theories and techniques of child-management, consultation procedures, parent and family education, and parent involvement within the school and community agencies and institutions. Prerequisite: C&I 210 or 250 and consent of instructor.

350 READING-LANGUAGE ARTS: EARLY ELEMENTARY**3 sem. hrs.**

Extension and integration of the concepts and skills utilized in teaching reading and other language arts in the early elementary years. Prerequisite: C&I 220 or 251 or 306.

353 CONTEMPORARY PROGRAMS IN ELEMENTARY SCHOOL SCIENCE**3 sem. hrs.**

Student investigations of ESS, SCIS, AAAS, COPES, materials commensurate with the teaching grade level. Emphasis placed on the investigative approach to the teaching of elementary science. Prerequisite: C&I 230 or consent of instructor.

354 DEMONSTRATION TECHNIQUES IN ELEMENTARY SCHOOL SCIENCE

2 sem. hrs.

Basic theory, rationale, and principles of effective demonstration science teaching in elementary school science. Includes analysis, synthesis, and utilization of both commercial and individually constructed demonstration apparatus and materials. Students will develop and use demonstration materials. Prerequisite: C&I 230 or 252 or consent of instructor.

360 PRINCIPLES OF GUIDANCE

3 sem. hrs.

Backgrounds, philosophy, and services in school guidance programs. Appraisal informational and counseling services. Role of the classroom teacher; organization of guidance activities.

361 STUDENT PERSONNEL WORK IN HIGHER EDUCATION

3 sem. hrs.

Fundamental concepts, organization and administration of higher education student personnel work. The student personnel worker as a facilitator in the changing educational scene.

362 BASIC SKILLS IN COUNSELOR EDUCATION

3 sem. hrs.

Introduction to, and laboratory practice in, the basic procedures and skills of counseling. (2 hours lecture and 2 hours laboratory.)

387 MEASUREMENT AND EVALUATION IN EDUCATION

3 sem. hrs.

Development, use and improvement of standardized and teacher-made tests and self-rating devices. Interpretation of test data and use of test results. Appropriate for elementary, secondary and college levels.

401 PSYCHOLOGY OF TEACHING READING

3 sem. hrs.

The study, analysis and investigation of psychological aspects of the act of reading.

402 RECENT RESEARCH IN READING

3 sem. hrs.

Analysis of recent research in reading at the elementary, secondary, and college levels together with its implications in the areas of modified practices in the teaching of reading, materials of instruction, and teacher preparation.

403 ORGANIZATION AND MANAGEMENT OF CLASSROOM LEARNING

3 sem. hrs.

The role of the classroom teacher in effective learning practices in the changing elementary

school. Organizing the school for effective living and learning; effective approaches to learning in the various curriculum areas in order to care for individual differences among children in the classroom.

404 INSTRUCTIONAL PROCEDURES IN ELEMENTARY EDUCATION

3 sem. hrs.

Study of selected instructional procedures employed in elementary education. Planning for instruction, determining of educational goals, nature of substantive content and the uses of staff. Prerequisite: Consent of instructor.

405 NURSERY-KINDERGARTEN EDUCATION

3 sem. hrs.

Criteria and procedures for developing, organizing and administering early education programs. Intended for persons who plan to be responsible for the establishment and supervision of nursery-kindergarten programs. Prerequisite: Consent of instructor.

406 ADVANCED SECONDARY SCHOOL READING

3 sem. hrs.

The role of the reading specialist in the secondary school; special provisions for meeting the reading needs of high school students; techniques and materials suitable for use in the secondary school. Prerequisite: One course in reading.

407 TEACHING READING IN THE CONTENT AREAS

3 sem. hrs.

Instructional methods and materials designed to integrate reading instruction with subject-matter instruction relative to grades 4 through 12. Includes investigation of informal classroom diagnosis, vocabulary development, levels of comprehension, patterns of organization, concept development, grouping procedures, inservice programs, consultant techniques, etc. Prerequisite: one course in reading and permission of instructor.

408 PRACTICUM IN READING FOR CLASSROOM TEACHERS

3 sem. hrs.

Designed for classroom teachers to help pupils in regular classrooms to overcome their reading problems. Through observation and participation in classrooms, students will become acquainted with ways of diagnosing and correcting reading difficulties. Individual and group conferences with the instructor will be scheduled. Prerequisite: Curriculum and Instruction 307 or permission of the adviser.

419 SEMINAR IN READING**3 sem. hrs.**

The content of the course will depend upon the needs and backgrounds of the students. Group and individual research of current practices, trends, and issues in reading will be employed. Prerequisite: 9 semester hours of graduate work in reading or the consent of the instructor.

420 DIAGNOSIS AND CORRECTION OF READING DISABILITIES**3 sem. hrs.**

Study in the causes and remediation of reading disabilities. Research findings will be utilized for suggested diagnosis and correction of various types of reading problems. Prerequisite: Curriculum and Instruction 301 or 401.

424 EDUCATIONAL CLASSICS**3 sem. hrs.**

Historic conceptions of education and their relevance to programs and practices today. Readings in the works of such leading educational thinkers as Plato, Locke, Rousseau, and Dewey. Prerequisite: One course in history or philosophy of education or consent of the instructor.

426 EDUCATION AND SOCIAL ISSUES**3 sem. hrs.**

Analysis of the relationship between educational institutions and the larger society. Emphasis on the problems raised by race, religion, social class, youth sub-cultures, the allocation of human resources and the means for resolving these problems. Prerequisites: Graduate standing in Curriculum and Instruction, Economics, Sociology, Political Science or consent of instructor.

428 SEMINAR IN FOUNDATIONS OF EDUCATION**2-3 sem. hrs.**

Intensive inquiry into the educational significance of problems generated by philosophical, social, or historical issues. Prerequisite: One graduate level course in the discipline appropriate to the study undertaken, or consent of the instructor.

430 WORKSHOP IN EDUCATION**2-6 sem. hrs.**

For experienced professional workers in the field of education. Emphasis given to serving superintendents, principals, supervisors, and teachers, who are presently responsible for some aspect of curriculum study and/or program improvement in their schools. Prerequisite: Teaching experience.

431 INDIVIDUALIZED FIELD WORK IN EDUCATION**2-3 sem. hrs.**

Direct experiences in working with elementary or high school students, public school curricula and staff and/or community groups involved in public school programs are provided. Approval for selecting this course and arranging for individual field work must be made by the department chairperson.

432 PHILOSOPHY OF EDUCATION**3 sem. hrs.**

Social forces and schools of philosophical thought which have contributed to education and which are influencing current educational practices. To help the student achieve a functional educational philosophy applicable in his teaching situations.

435 INSTRUCTIONAL SYSTEMS**DEVELOPMENT****1 sem. hr.**

Cross-listed in Information Sciences. Not to be repeated.

437 ANALYSIS OF TEACHING**3 sem. hrs.**

For various school personnel, including prospective college teachers of education who are interested in methodical study of teaching behavior. Major research attempts in assessing teacher effectiveness and problems connected with such efforts. Descriptive studies and conceptual systems of teaching, their nature and possible uses.

439 APPLIED CHILD GROWTH AND DEVELOPMENT FOR THE ELEMENTARY TEACHERS**3 sem. hrs.**

Application of principles of child growth and development in the elementary classroom. Practice in the use of scientific procedures in the discovery of causes and the solution of classroom problems. Prerequisite: Curriculum and Instruction 210 or consent of the instructor.

440 STATISTICS II**3 sem. hrs.**

The logic of statistical inference. An examination of the statistical techniques most commonly employed in research in education and the behavioral sciences. Topics included are interval estimation the *t* and *f* tests, chi-square, one factor analysis of variance, multiple regression, and non-parametric statistics. The emphasis is on application and interpretation. Prerequisite: Curriculum and Instruction 340.

441 EXPERIMENTAL DESIGN**3 sem. hrs.**

The statistical principles of widely employed designs, including simple randomized factorial, repeated measures, randomized blocks, latin square and analysis of covariance. Topics such as multiple comparisons, power and trend analysis are also covered. Prerequisites: Curriculum and Instruction 340, 440 (Statistics I and II).

450 LANGUAGE ARTS INSTRUCTIONAL STRATEGIES**3 sem. hrs.**

Analysis and application of learning theories and child growth and development principles to curriculum organization, instructional materials and techniques for elementary school language arts programs.

452 ELEMENTARY SCHOOL SOCIAL STUDIES: INSTRUCTIONAL STRATEGIES**3 sem. hrs.**

Utilization of the structure, concepts and modes in inquiry of the social sciences in implementing curriculum trends and innovations in elementary school social studies programs. Instructional strategies, such as inquiry and simulation, techniques for developing skills, understandings and attitudes characteristic of the social studies. Prerequisite: Curriculum and Instruction 476 or consent of instructor.

453 ELEMENTARY SCHOOL SCIENCE: INSTRUCTIONAL STRATEGIES**3 sem. hrs.**

Analysis and application of current research findings to the selection, construction, utilization, evaluation, and implementation of science instructional materials.

454 INDIVIDUALIZING SCIENCE INSTRUCTION**3 sem. hrs.**

Rationale, psychological basis of, principles and theories of individualizing science instruction; the role of the teacher, the learner, classroom management, evaluating pupil progress, and implementation procedures will be considered. Primary emphasis upon construction of individualized instruction modules in science.

455 INSTRUCTIONAL SKILLS FOR INQUIRY TEACHING**3 sem. hrs.**

A study of verbal and non-verbal classroom (K-12) interactions, cognitive and effective strategies for achieving inquiry oriented objectives, and selection of learning materials conducive to inquiry learning. Prerequisite: teaching experience.

456 ISSUES AND TRENDS IN SECONDARY SCHOOL SCIENCE EDUCATION**3 sem. hrs.**

Review of current literature, comparative studies of new curriculum materials, analysis of instructional methods and goals for science education, (6-12) and development of proposal to investigate further one of the concerns identified. Prerequisite: teaching experience.

460 GUIDANCE APPRAISAL**3 sem. hrs.**

The administration and interpretation of appraisal techniques appropriate to the student's level of interest: elementary, secondary, or higher education. Special emphasis on student self-appraisal. Prerequisite or concurrent registration: Curriculum and Instruction 360.

461 ORGANIZATION OF GUIDANCE SERVICES**3 sem. hrs.**

The activation, organization, administration and utilization of guidance services. Selection of personnel, in-service education of the staff, evaluation of the program and steps in the introduction of a comprehensive program are considered. Prerequisite: Curriculum and Instruction 360.

462 PRACTICUM IN COUNSELING AND GUIDANCE**3-6 sem. hrs.**

Supervised experience in individual and/or small-group counseling. May be repeated for credit for a total of six semester hours. Prerequisites: Curriculum and Instruction 360, 464, and permission of instructor.

463 THEORY AND PRACTICE IN GROUP COUNSELING**3 sem. hrs.**

Participation in a group with associated study of interpersonal relationships through tapes, films, observation, and related reading. Also includes study of relevant theories of group counseling and interaction. May be repeated for credit for a total of six semester hours. Prerequisite or concurrent registration: Curriculum and Instruction 360.

464 THEORIES AND TECHNIQUES OF COUNSELING**3 sem. hrs.**

Goals, methods and procedures as seen from a number of differing theoretical positions. Emphasis on interpersonal dimensions of counseling interviews. Case material illustrating applications in a variety of counseling situations — schools, community, college and university, focusing on problems of personal-social, educational, and vocational adjustment.

465 VOCATIONAL COUNSELING**3 sem. hrs.**

Acquiring and using occupational and educational information. Consideration of job requirements and training opportunities; developing occupational units; nature of vocational development.

466 JUNIOR COLLEGE COUNSELING**3 sem. hrs.**

Problems and characteristics of counseling in community junior colleges. Prerequisites: Curriculum and Instruction 360 and either Educational Administration 472 or Junior College experience.

467 THEORY AND PRACTICE IN ELEMENTARY SCHOOL COUNSELING**3 sem. hrs.**

Counseling and guidance services for the elementary school with major emphasis on counselor role, application of counseling theory, technique, and practice to the elementary school setting. Designed for those who intend to specialize in counseling and guidance in the elementary school. Prerequisites: Curriculum and Instruction 360 and consent of instructor.

474 STUDIES IN COLLEGE TEACHING**1-4 sem. hrs.**

A study of the competencies necessary for effective teaching in higher education. The course consists of four components which may be taken separately or in combination. These components are: 1) roles and responsibilities of the college teacher; 2) the analysis of instruction in higher education; 3) instructional strategies and techniques; 4) the evaluation of instruction. Each student is also expected to undertake reading and research on problems of college teaching in his area of specialization. May be repeated for credit if different components are taken. Prerequisite: Graduate standing.

475 PROFESSIONAL LABORATORY EXPERIENCE**3 sem. hrs.**

The role of professional laboratory experiences in teaching and learning. Significant trends, philosophies and programs of teacher education. For experienced teachers, supervisors of instruction, school administrators and college teachers associated with teacher education programs.

476 CURRICULUM THEORY**3 sem. hrs.**

The nature of curriculum theory and the sources of knowledge utilized in the formulation of curriculum theory. Critical analysis of major curriculum patterns that have emerged in Ameri-

can education. Approaches to curriculum study, revision and evaluation.

477 SUPERVISION OF INSTRUCTION**3 sem. hrs.**

The improvement of instruction through supervision. Emphasizing the leadership role; recent research concerning pupils learning group dynamics; action research and its application. Evaluation of pupils, teachers, supervisors and supervisory practice.

478 SEMINAR IN SUPERVISION OF INSTRUCTION**3 sem. hrs.**

Prerequisite: Curriculum and Instruction 477.

479 RESEARCH STUDIES IN ELEMENTARY CURRICULUM**4 sem. hrs.**

Examination of the professional literature that reports established trends, research efforts and practice in elementary curriculum. Emphasis on the broad themes which transcend the separate disciplines in elementary education. Three hours of classroom work and one hour in a field laboratory project. Prerequisite: Curriculum and Instruction 476 or consent of instructor.

481 SEMINAR IN CURRICULUM EVALUATION**3 sem. hrs.**

Seminar for graduate students interested in evaluating instruction. At the end of the seminar participants will have systematically obtained data on an innovative project, and made value-assessments of the project based on these data. The evaluation studies may be used to improve the project studies, or as the basis for a doctoral dissertation, or publishable paper. Prerequisite: Curriculum & Instruction 476 or consent of instructor.

487 ADVANCED EARLY CHILDHOOD EDUCATION**3 sem. hrs.**

The utilization of current concepts in early childhood education to be made available to graduate students who are working in schools and other appropriate educational settings. Prerequisite: Professional experience with children or consent of instructor.

488 DESIGN AND IMPLEMENTATION OF CONTEMPORARY COMPREHENSIVE EARLY CHILDHOOD EDUCATION PROGRAMS**3 sem. hrs.**

The design and implementation of programs concerned with infants, toddlers, pre-kindergarten and early elementary school children in edu-

cational settings. Prerequisites: Professional involvement in an agency or institution providing early childhood education programs, Curriculum and Instruction 487 or consent of instructor.

490 RESEARCH METHODOLOGY IN EDUCATION

1-6 sem. hrs.

Provides for individualized and advanced study of methodology specific to the student's research interest. Consult instructor prior to registration. Prerequisites: Curriculum and Instruction 340 and 497 or consent of instructor.

491 INTERNSHIP IN COLLEGE TEACHING

3 sem. hrs.

Observation and teaching in the student's major area, with other experiences appropriate to academic involvement at the college level offered in cooperation with the student's major department.

493 PERSPECTIVES OF TEACHER EDUCATION

3 sem. hrs.

For advanced graduate students preparing for positions associated with the preparation of teachers and specialized school personnel. Admission, curricula, instruction, certification, accreditation, evaluation, problems, issues and trends in the selection and preparation of teachers. Prerequisite: Master's degree or permission of instructor.

495 SEMINAR IN CURRICULUM

3 sem. hrs.

Major developments and experimental programs impacting upon school curricula. Students identify curriculum innovations for research. Prerequisite: Advanced graduate standing or special permission of the instructor and Curriculum and Instruction 476.

496 SEMINAR IN ELEMENTARY EDUCATION

3 sem. hrs.

Prerequisite: Consent of the instructor.

497 INTRODUCTION TO RESEARCH METHODOLOGY

3 sem. hrs.

Selection of a research problem, collection of data, types of research, the research report and use of the library in connection with the research problem. Emphasis on understanding and interpreting frequently used statistical concepts. Provides a background for the preparation of the thesis. Enables the student to become an intelligent consumer of the products of educational research.

498 PROFESSIONAL PRACTICE

3-8 sem. hrs.

Refer to General Courses, page 118.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

520 STUDIES IN AMERICAN HIGHER EDUCATION

1-3 sem. hrs.

Studies of the major historical and philosophic dimensions of American higher education and their relationship to significant contemporary issues.

521 THEORY OF CURRICULUM IN HIGHER EDUCATION

1-3 sem. hrs.

Major curriculum theories will be used for comparative analysis and research of specific movements. Individualized research and comprehensive reading requirement. Prerequisite: Consent of instructor.

560 CONTEMPORARY TOPICS IN COUNSELOR EDUCATION

2-3 sem. hrs.

Differing topical emphasis based upon the areas of student interest and current developments in Counselor Education. May be repeated if topic and content are different. No more than 3 hours may be counted toward the Master's degree for the thesis and comprehensive options; a maximum of 9 hours for a student taking the 39 hour master's program; advanced graduate students in Counselor Education; or equivalency and permission of chairperson.

580 RECENT RESEARCH IN SECONDARY EDUCATION

3 sem. hrs.

Comprehensive review of recent research. Students will gather recent research from dissertations, theses, and current periodicals. This research will be synthesized, analyzed and evaluated. Prerequisite: C&I 497. It is suggested that C&I 476 be taken prior to this course.

Educational Administration

Chairperson of the Department: Clayton Thomas. Office: 331 DeGarmo Hall.

Teaching Staff: V. Adams, G. Budig, M. Chambers, C. Edwards, E. Egelston, G. A. Hickrod, B. Hubbard, D. Jackson, R. Laymon, F. Matsler, J. McCarthy, H. McGrath, C. Sabine, C. Thomas.

Programs Offered

Work leading to a master's degree, Specialist in Education degree, and the Ed.D. and Ph.D. degrees is offered in Educational Administration.

Programs are also available for persons holding graduate degrees who wish to meet administrative certification requirements.

Master's Degree Program

At least 21 semester hours of course work in Educational Administration and supervision as approved by the department as equivalent are required including Curriculum and Instruction 476 and 497; Educational Administration 478, 479, 481 and 485; Sociology 465; and for the 39-hour master's degree program described below, Educational Administration 482. Additional courses are selected with the recommendations and consent of the adviser in this curriculum.

Students without teaching experience may be admitted to this program but will be expected to obtain experience in education prior to certification for administrative positions in Illinois public schools.

University requirements for master's degree programs are listed elsewhere in this catalog. In addition to the regular requirements, a Master of Science in Education may be awarded in Educational Administration upon the completion of 39 hours of course work provided that the above requirements are met and at least six hours are taken in fields other than Education.

A program in Educational Administration and Special Education is offered in cooperation with the Department of Special Education. Consult the chairperson of either department for details of the program.

Specialist and Doctoral Programs

The Department offers work leading to the Specialist in Education degree and the Ed.D. and Ph.D. degrees in Educational Administration. These programs have as their major purpose the preparation of administrators in educational institutions at all levels. In addition, the doctoral program may prepare individuals for research positions in educational administration. University requirements for these degree programs are listed elsewhere in this catalog.

Cooperative Program with Sangamon State University

Through a joint agreement with Sangamon State University, students may take approved courses from either of the universities and receive commensurate credit toward a specialist degree in educational administration, which will be awarded by Illinois State University. Students in the program must take a minimum of 15 hours,

plus a research project with Illinois State University faculty on either campus. The ISU faculty will regularly offer course-work on the SSU campus. The cooperating universities are treated as a single site with regard to the fulfillment of residence requirements.

Certification Programs

Requirements for administrative certificates may be met through the degree programs in educational administration. Individuals already holding advanced degrees in related fields may meet certification requirements by completing an individually designed program. Requests for entry into the non-degree certification program should be made with the Graduate School Dean. Applications for degree programs should be made with the Office of Admissions and Records.

Foreign Language Requirements for Ph.D. Candidacy

General Graduate School requirements apply. However, when approved by the chairperson of the Department of Educational Administration and Dean of the Graduate School, a student may substitute evidence of proficiency in statistics for one of the two foreign languages specified in the general requirements for the Ph.D. degree. Evidence of having met this statistical proficiency may be shown by:

1. Successful completion of two 400 level courses in statistics and/or psychometrics, or
2. Passing an examination showing proficiency expected of one having completed two 400 level courses in statistics and/or psychometrics. An examination prepared for this latter option should be the joint responsibility of the Department of Psychology and the Department of Educational Administration.

Courses

430 WORKSHOP IN EDUCATION

2-6 sem. hrs.

Planned experience designed to meet the in-service needs of professional personnel in education.

431 INDIVIDUALIZED FIELD WORK IN EDUCATION

2 or 3 sem. hrs.

(See Curriculum and Instruction 431.) Consent of Department Chairperson.

472 THE COMMUNITY COLLEGE

3 sem. hrs.

History and development, functions, curricu-

la, instruction, organization, financing and current problems of the community college. The community college is studied in relation to other units of the higher education system.

473 SEMINAR IN THE COMMUNITY COLLEGE

3 sem. hrs.

Special problems related to the community college such as improvement of instruction, adopting new missions and programs and meeting societal pressures for change. The content of the course will vary from semester to semester in part, according to the needs and interests of the students.

478 LEGAL BASES OF PUBLIC EDUCATION

3 sem. hrs.

479 FINANCIAL BASES OF PUBLIC EDUCATION

3 sem. hrs.

Acquaint students with major concepts, research and public policy controversies in school finance.

480 EDUCATIONAL FACILITIES PLANNING

3 sem. hrs.

481 ADMINISTRATION AND ORGANIZATION OF SCHOOLS

3 sem. hrs.

482 ADMINISTRATION SEMINAR

3 sem. hrs.

Culminating seminar for 39 hour master's degree program. Emphasis upon changing educational relationships, students' major concerns and current problems. Prerequisite: Enrolled in last semester 39-hour program or after completion of required Educational Administration courses, or consent of Department Chairperson.

484 ADMINISTRATION OF CONTINUING EDUCATION AND PUBLIC SERVICE

3 sem. hrs.

Administration of continuing education and public service; emphasis upon developing, financing, staffing, sustaining and administering continuing education and public service of all educational institutions. Prerequisite: Admission for graduate work.

485 THE PRINCIPALSHIP

3 sem. hrs.

Development of knowledge and competencies of the school building principal. Prerequisites: EDA 478 and EDA 481 or consent of Department Chairperson.

486 PERSONNEL ADMINISTRATION

3 sem. hrs.

Provides general understanding of personnel functions in education. Special emphasis on manpower planning, recruitment selection and ap-

praisal of personnel and negotiations.

487 ORGANIZATION DEVELOPMENT

3 sem. hrs.

Emphasis will be on conceptual understanding and skill development in planned change, conflict management, interpersonal communications, group processes and team building as they relate to improving organizations.

488 OCCUPATIONAL AND GENERAL ADMINISTRATION BY COMPETENCY

3 sem. hrs.

A competency based individualized course to prepare pre and in-service participants for occupational and general administration. Materials charge. Prerequisite: Consent of Instructor.

496 MANAGEMENT OF EDUCATIONAL FUNDS

3 sem. hrs.

Development of high competence and deeper concepts of school finance, with particular emphasis on the management phase. Includes management of all school funds, program budgeting, financial accounting, financial statements and reports, safeguards, debt service, and management of special problems of finance. Prerequisite: Educational Administration 479 or approval of instructor.

498 PROFESSIONAL PRACTICE

3-8 sem. hrs.

Refer to General Courses, page 118.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

561 UNDERSTANDINGS IN THE ADMINISTRATION OF HIGHER EDUCATION

3 sem. hrs.

Goals, policies, practices, and problems of contemporary American Higher Education. Introduction to the literature of higher education.

562 UNIVERSITY FISCAL ADMINISTRATION

3 sem. hrs.

Collection and utilization of basic data for decision making, evaluating the educational environment, allocation and utilization of resources and systems of planning at the institutional level.

563 CRUCIAL ISSUES IN ADMINISTRATION OF AMERICAN HIGHER EDUCATION

3 sem. hrs.

Topics will vary and students will do research on selected critical issues. Prerequisite: EDA 561 or Consent of Instructor.

570 THE PUBLIC FINANCE OF HIGHER EDUCATION

3 sem. hrs.

Course is cross-listed as Economics 470. Prerequisite: Educational Administration 479, Economics 400, or permission of the instructor.

571 COLLEGE ADMINISTRATION**3 sem. hrs.**

Understanding of the complexity and unique qualities needed to direct and govern institutions of higher education. Prerequisite: EDA 561 or Consent of the Department Chairperson.

576 ADMINISTRATION OF INSTRUCTIONAL PROGRAMS**3 sem. hrs.**

Administrative strategies for implementing, maintaining, changing, and evaluation of instructional programs and curriculum. Prerequisites: EDA 485 and C&I 476 or Consent of Instructor.

578 LEGAL BASES OF HIGHER EDUCATION**3 sem. hrs.**

This course may be repeated as the course topic changes. The three topics are: Developing Law of the Student and College, Faculty and Staff Before the Bench, and Entity Property and Finance. For persons holding master's degree in any field. Prerequisite: Advanced graduate standing or consent of instructor.

579 RESEARCH SEMINAR ON THE PUBLIC FINANCE OF EDUCATION**3 sem. hrs.**

Seminar for graduate students who wish to understand and conduct research on the financing of education at K-12, junior college, and higher education levels.

582 ADMINISTRATION AS A SCIENCE AND AS AN ART**3 sem. hrs.**

Second course is a basic sequence of an administration core; sociological and behavioral implications for organization and administration. Prerequisites: Educational Administration 481 or EDA 561 or consent of instructor and advanced graduate standing. Not open to master's students.

583 EDUCATIONAL LEADERSHIP**3 sem. hrs.**

Designed to provide an understanding of the leadership function in formal and informal organizations. Required of all doctoral candidates in school administration. Prerequisites: Educational Administration 582 and admission to the doctoral program.

584 SUPERINTENDENT AND CENTRAL STAFF**3 sem. hrs.**

Development of knowledge, responsibilities, and competencies required of chief administrative officer, and in the case of larger districts, his central staff. Prerequisite: Advanced graduate standing.

588 FIELD WORK IN EDUCATIONAL ADMINISTRATION**3-4 sem. hrs.**

Provides responsibilities and experiences in the study of administrative problems in school-community setting. Prerequisites: Advanced standing and consent of instructor.

594 RESEARCH SEMINAR IN EDUCATIONAL ADMINISTRATION**3 sem. hrs.**

Designed for dissertation proposal development for doctoral (and specialist) students. Emphasis on the design of a proposal ready for committee consideration. Study of the various methodological and design components. Successful completion of the work is the approved proposal.

596 ADVANCED SEMINAR IN EDUCATIONAL ADMINISTRATION**3 sem. hrs.**

Designed for advanced graduate students in Educational Administration. Content will vary according to the needs of students and the emerging problems that need depth study. May be repeated providing the subject matter is not repeated. Prerequisite: Advanced graduate standing.

599 DISSERTATION RESEARCH**Variable credit**

Research relating to research requirements for Specialist, Doctor of Philosophy, and Doctor of Education degrees. Approval of the chairperson of the department of the program in which the student is enrolled is required. Maximum of 16 semester hours credit in research may be counted toward residency.

English

Chairperson of the Department: Carmen Richardson. Office: Stevenson Hall 409-D.

Director of Graduate Studies: Donald H. Erickson. Office: Stevenson Hall 409-B.

Teaching Staff: R. Allen, R. Bellas, F. Bishop, I. Brosnahan, L. Brosnahan, R. Carr, C. Cox, N. Crowell, R. Dammers, P. Drawver, R. Duncan, K. Easson, R. Easson, D. Erickson, L. Getsi, V. Gimmestad, G. Grever, C. Harris, J. Heissler, J. Hill, D. Holden, V. Hutton, M. Jochums, S. Kagle, W. Linneman, E. McMahan, W. Morgan, J. Neuleib, R. Newby, T. Ranta, S. Renner, C. Richardson, J. Scrimgeour, R. Sutherland, R. Tarr, D. Vetter, R. White, L. Wilcox, W. Woodson.

The Department of English offers programs of graduate work leading to the Master of Arts, Master of Science and the Doctor of Arts. Uni-

versity requirements for these degrees are listed elsewhere in this catalog. Departmental requirements are as follows.

Master's Degree Programs

The Master of Arts degree requires a minimum of two years of college-level French, German, or other approved language or demonstrated equivalent ability. The Master of Science degree requires no foreign language competency. For these degrees the student generally completes all of the 32 hours of course work within the Department, unless the student chooses a Special Studies option or teaching program which permits him or her to elect 11-14 hours of coursework in cognate fields. If a student chooses to write a thesis, he or she must complete 27 hours of coursework and write a thesis followed by an oral examination.

Those students interested in teaching may elect to fulfill the requirements of the College Teaching Program, the Community College Teaching Program, the Secondary Teaching Program, the K-9 English Teaching Program, or other Special Studies Options offered by the Department. The student may work toward a Master of Arts degree or a Master of Science degree in teaching by meeting the Special Degree requirements specified in this catalog. The requirements for the College, Community College, and Secondary Teaching Programs are set out elsewhere in this catalog. More detailed information on all these programs is included in the Graduate Handbook of the Department of English.

Candidates for all master's degrees in English must have at least 12 hours of 400-level coursework, eight hours of which must be in English; candidates must complete at least 18 total graduate hours of English courses.

A student may take a course designated "Studies," "Selected Figures" or "Seminar" more than once, provided the coursework does not duplicate subject matter previously covered.

Doctor of Arts

The Doctor of Arts in English provides training for those who have a demonstrated career commitment to teaching in two-and four-year institutions of higher education. Its purpose is to enable individuals to pursue doctoral level study for improving college undergraduate instruction and curriculum in English and related disciplines.

Program requirements, which are met by successful completion of written and oral examinations, include a central core of doctoral English Seminars in Literature, Language, and Com-

position (8-12 semester hours) and graduate English courses (8-12 semester hours); an education component consisting of a Professional Seminar in the Teaching of English, a Practicum-Internship in the Teaching of English, and a Higher Education Sequence (20 semester hours); cognate course work in such related areas as Humanities, Social Sciences, Fine Arts, Education and English (14 semester hours); and a culminating dissertation that provides an opportunity for original research in both English subject matter and its application to teaching.

A full-time student should normally complete the program in two calendar years. A part-time student (residency requirement is ordinarily one year, but can be reduced to one semester) should complete the program in four years.

Admission to the program requires a Master's Degree or equivalent and, ordinarily, prior teaching experience. For additional information consult the Graduate Handbook or write the Director of Graduate Studies, Department of English, Illinois State University.

Courses

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

Intensive study of particular lands, environments, cultures, literatures and peoples. May be given in cooperation with other departments.

307 MULTI-DISCIPLINARY SEMINAR

3 sem. hrs.

Formerly ENG 398. Intensive study in subject matter which crosses disciplinary lines, to be offered by two or more departments.

310 HISTORY AND DEVELOPMENT OF THE ENGLISH LANGUAGE

3 sem. hrs.

Development of the English language from the Old English period to the present, with attention to operational structures of contemporary English.

311 INTRODUCTION TO OLD ENGLISH

3 sem. hrs.

The elements of Old English grammar, with selected readings in Old English literature.

312 BEOWULF AND OTHER OLD ENGLISH POEMS

3 sem. hrs.

Beowulf and other Old English poetry in Old English with discussion of forms, types and characteristics. Prerequisite: English 311 or consent of instructor.

313 MIDDLE ENGLISH LANGUAGE AND LITERATURE**3 sem. hrs.**

Introduction to middle English language and literature (1100-1500) with selected readings in the five major dialects of Middle English, excluding Chaucer.

317 VICTORIAN PROSE**3 sem. hrs.**

Major non-fiction prose writers of period 1832-1901, such as Carlyle, Mill, Newman, Ruskin, Arnold, Huxley, and Pater.

320 CHAUCER**3 sem. hrs.**

Literary and linguistic study of the major works of Chaucer; text in Middle English.

324 MILTON**3 sem. hrs.**

Major poetry and prose of John Milton; special attention to *Paradise Lost*.

325 ENGLISH DRAMA BEFORE 1642**3 sem. hrs.**

English drama, excluding Shakespeare, from its beginning to the closing of the theaters; such authors as Marlowe, Jonson, Webster.

327 RESTORATION AND EIGHTEENTH-CENTURY DRAMA**3 sem. hrs.**

English drama from 1660 to 1800, including such playwrights as Dryden, Wycherley, Congreve, Goldsmith, Sheridan.

328 MODERN BRITISH AND AMERICAN DRAMA**3 sem. hrs.**

Twentieth century British and American drama and related criticisms; such playwrights as Shaw, O'Neill, Williams, Albee, Pinter, Beckett.

332 SELECTED FIGURES IN AMERICAN LITERATURE**3 sem. hrs.**

Study of important literary figures, genres, or movements. May be repeated if content is different.

336 THE AMERICAN NOVEL**3 sem. hrs.**

Historical survey of major American novelists, including such authors as Hawthorne, Melville, Clemens, Crane, Hemingway, Faulkner, Barth.

341 INTRODUCTION TO DESCRIPTIVE LINGUISTICS**3 sem. hrs.**

Aims and methods of linguistic science, nature and functions of language: phonology, morphology, syntax, dialectology. Relationship of language to culture.

342 INTRODUCTION TO HISTORICAL LINGUISTICS**3 sem. hrs.**

Historical comparative linguistics concentrating on the Indo-European family. Causes and types of linguistic change. Prerequisite: English 341 or consent of instructor.

347 ADVANCED CREATIVE WRITING**3 sem. hrs.**

Workshop format for individual projects, usually the writing of a series of poems or group of short stories. Prerequisite: ENG 247 or consent of instructor.

348 PLAYWRITING**3 sem. hrs.****Also offered at Theatre 348**

Playwriting techniques of selected masters with practical application of techniques in writing original plays.

349 TECHNICAL WRITING**3 sem. hrs.**

Instruction and practice in the forms and techniques of technical writing, adapted wherever possible to the professional interests of the individual student. Prerequisite: English 101 or consent of instructor. Also offered at IT 349.

365 MINORITY LITERATURE**3 sem. hrs.**

20th century literature written by American ethnic minorities. Study of literary figures, genres, movements, and thematic conceptions.

370 STUDIES IN THE HISTORY OF LITERATURE FOR YOUNG PEOPLE**3 sem. hrs.**

Advanced critical, chronological examination of literature for children and adolescents from folklore origins to 1900. Prerequisite: English 170 or consent of instructor. May be repeated if content is different.

372 STUDIES IN CONTEMPORARY LITERATURE FOR YOUNG PEOPLE**3 sem. hrs.**

A problem-centered course, emphasizing trends and research related to recent literature for children and adolescents. Prerequisite: English 170 or consent of instructor. May be repeated if content is different.

373 VERSE FOR CHILDREN**3 sem. hrs.**

Verse for use in kindergarten through grade eight, including various categories, elements, and well-known poets in the field. Prerequisites: English 170 and 271 or 272 or consent of instructor. Formerly English 273.

375 STUDIES IN LITERATURE FOR ADOLESCENTS**3 sem. hrs.**

Advanced critical examination of literature for grades seven through twelve with emphasis on trends and research. May be repeated if content is different.

382 LITERARY CRITICISM**3 sem. hrs.**

Historical survey of selected great texts in literary and critical theory from Plato to Northrop Frye.

386 THE EIGHTEENTH-CENTURY ENGLISH NOVEL**3 sem. hrs.**

The English novel from its origins through the eighteenth century, including such writers as Richardson, Fielding, Smollett, Sterne.

387 THE NINETEENTH-CENTURY ENGLISH NOVEL**3 sem. hrs.**

The English novel between 1800 and 1900, treating such writers as Austen, Thackeray, Dickens, Eliot, Hardy.

388 THE TWENTIETH-CENTURY ENGLISH NOVEL**3 sem. hrs.**

The English novel since 1900, treating such writers as Bennett, Lawrence, Woolf, Joyce, Greene.

390 RECENT RESEARCH IN THE TEACHING OF THE LANGUAGE ARTS**3 sem. hrs.**

Critical study of current practice and research in the teaching of the language arts in the elementary school. Prerequisite: English 290 or equivalent, or consent of instructor.

392 MODERN THEORIES OF RHETORIC**3 sem. hrs.**

Studies of the principles of rhetoric to serve as basis for understanding contemporary rhetorical theories.

395 PROBLEMS IN THE TEACHING OF ENGLISH**3 sem. hrs.**

Examination of theory and practice in the

teaching of language, literature, and composition at the secondary level. Prerequisite: Experience in teaching (student teaching acceptable) or English 296 or English 297.

397 RESEARCH SEMINAR**3 sem. hrs.**

Introduction to bibliography, methods of research, critical evaluation of scholarship, and applied literary criticism.

413 STUDIES IN MEDIEVAL ENGLISH LITERATURE**3 sem. hrs.**

Selected linguistic, textual, or literary topics in Middle English (1100-1500). Prerequisite: English 313 or 320 or consent of instructor.

414 STUDIES IN SIXTEENTH-CENTURY ENGLISH LITERATURE**3 sem. hrs.**

Several important authors such as More, Sidney, and Spenser, or a particular literary movement or genre.

415 STUDIES IN SEVENTEENTH-CENTURY ENGLISH LITERATURE**3 sem. hrs.**

Non-dramatic works of selected seventeenth-century writers such as Bacon, Donne, Jonson, Bunyan, Dryden (excluding Milton).

416 STUDIES IN EIGHTEENTH-CENTURY ENGLISH LITERATURE**3 sem. hrs.**

Important authors of the period, such as Pope, Swift, Johnson, or a particular movement or genre.

417 STUDIES IN THE LITERATURE OF THE ROMANTIC PERIOD**3 sem. hrs.**

Selected authors, movements, or genres treating such authors as Blake, Wordsworth, Coleridge, Byron, Shelley, Keats.

418 STUDIES IN VICTORIAN LITERATURE**3 sem. hrs.**

Authors in the period 1832-1901, such as Browning, Carlyle, Tennyson, Mill, Arnold.

419 STUDIES IN CONTEMPORARY ENGLISH LITERATURE**3 sem. hrs.**

Several figures such as Yeats, Joyce, Thomas, Pinter, or a movement or genre.

420 STUDIES IN CHAUCER**3 sem. hrs.**

Advanced research and study in the works of Chaucer. Prerequisite: English 320 or equivalent.

422 STUDIES IN SHAKESPEARE**3 sem. hrs.**

Major critical problems in representative plays of Shakespeare.

424 STUDIES IN MILTON**3 sem. hrs.**

Advanced study and research in the life and works of John Milton.

428 STUDIES IN DRAMA**3 sem. hrs.**

Advanced study in selected works and topics from English, American, and continental drama.

431 STUDIES IN EARLY AMERICAN**LITERATURE****3 sem. hrs.**

Figures, movements, or genres from 1607-1830, treating such authors as Taylor, Bradstreet, Paine, Irving.

432 STUDIES IN AMERICAN LITERATURE**1830-1870****3 sem. hrs.**

Figures, movements, or genres in the American Romantic Period, treating such authors as Poe, Hawthorne, Emerson, Melville, Whitman.

433 STUDIES IN AMERICAN LITERATURE**1870-1920****3 sem. hrs.**

Figures, movements, or genres in the American Realistic-Naturalistic Period, treating such authors as Dickenson, Clemens, James, Crane, Dreiser.

434 STUDIES IN CONTEMPORARY AMERICAN LITERATURE**3 sem. hrs.**

Figures, movements, or genres in American literature since 1920, treating such authors as Eliot, Fitzgerald, Hemingway, Steinbeck, Faulkner.

440 STUDIES IN ENGLISH LINGUISTICS**3 sem. hrs.**

Advanced study and research in various aspects of the English language. Prerequisite: English 341 or equivalent.

450 STUDIES IN ANCIENT LITERATURE**3 sem. hrs.**

Selected readings from antiquity, mostly Biblical and classical, with consideration of Eastern literature.

452 STUDIES IN THE RENAISSANCE**3 sem. hrs.**

Figures, movements, or genres from the European Renaissance (1300-1650), including such

authors as Rabelais, Petrarch, Montaigne, Cervantes.

453 STUDIES IN THE ENLIGHTENMENT**3 sem. hrs.**

Figures, movements, or genres from the European Enlightenment (1650-1770) including such authors as Voltaire, Moliere, Racine, Diderot.

454 STUDIES IN EUROPEAN ROMANTICISM**3 sem. hrs.**

Figures, movements, or genres of the period 1770-1850 in Europe, including such authors as Goethe, Rousseau, Hugo, Heine.

456 STUDIES IN MODERN WORLD**LITERATURE****3 sem. hrs.**

Figures, movements, or genres in World Literature from the mid-nineteenth century to the present, including such authors as Dostoevsky, Tolstoy, Camus, Mishma, Solzhenitsyn.

482 STUDIES IN LITERARY CRITICISM**3 sem. hrs.**

Problems or topics in literary criticism and theory, such as Archetypal, Freudian, Historical, etc.

483 STUDIES IN RHETORIC AND ENGLISH PROSE-STYLE**3 sem. hrs.**

History and Characteristics of English prose style at various stages of its development. Prerequisite: English 241 or 310 or equivalent.

486 STUDIES IN THE ENGLISH NOVEL**3 sem. hrs.**

Topics in the development of the English novel, with attention to particular techniques, figures, themes or movements.

487 STUDIES IN THE AMERICAN NOVEL**3 sem. hrs.**

Topics in the development of the American novel, with attention to particular techniques, figures, themes or movements.

491 INTERNSHIP IN COLLEGE TEACHING OF ENGLISH**3 sem. hrs.**

Supervised teaching at a cooperating community college or university. (Cross-listed with Curriculum and Instruction 491).

492 RECENT RESEARCH IN THE ENGLISH LANGUAGE ARTS**3 sem. hrs.**

Advanced study of significant research for elementary-junior high levels, tools and design of empirical research, needed research, student models. Prerequisite: Ability in statistics.

493 TOPICS IN ENGLISH**1-3 sem. hrs.**

Advanced study and research in an announced area of language or literature.

494 INDEPENDENT READING**1-3 sem. hrs.**

Intensive study of a topic not currently covered in existing courses. Prerequisite: Approval of sponsoring faculty member and of Department Chairperson.

496 STUDIES IN BIBLIOGRAPHY**2 sem. hrs.**

Printing, bibliographical evidence, relation of manuscript to printed text, and problems of editing. Prerequisite: English 397.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Foreign Languages

Chairperson: Richard O. Whitcomb. Office: Stevenson Hall 425.

Teaching Staff: T. Comfort, A. G. Ferguson, B. Fritzen, W. Fuehrer, B. Kuhn, J. Laurenti, D. Parent, K. Parker, G. Petrossian, J. A. Rodriguez, P. Tarrant.

The Department of Foreign Languages reserves the right to examine transfer students as to their ability to carry courses on the 300 level.

The department offers work leading to the following degrees: M.A., M.S. in Ed. The master's degree program is flexible, permitting specialization in either French or Spanish. Courses are approved by major adviser and chairperson of the Department of Foreign Languages. A thesis may be required at the discretion of the chairperson of the department.

Residence Requirements

A candidate for a master's degree must spend at least one full term in residence in order to qualify for the degree. A full term may be interpreted as one semester, with a class load of 8-15 hours, or a summer session with a class load of from 6-9 hours.

General Courses**300 RESEARCH IN FOREIGN LANGUAGES****1-3 sem. hrs.**

Supervised work in a foreign language, in comparative language studies or in educational materials for a foreign language laboratory. Assignments will depend on the preparation and interest of the student. Consent of department chairperson.

491 INTERNSHIP IN COLLEGE TEACHING IN THE FOREIGN LANGUAGES**1-3 sem. hrs.**

Credit for this course is given in Curriculum and Instruction. (See Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH**METHODOLOGY****1-6 sem. hrs.**

Introduction to bibliography, methods of scholarly research and the critical evaluation of research in the field. Must be taken by first year graduate students unless the department requires Curriculum and Instruction 475.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

French Courses**301 FRENCH ROMANTICISM****3 sem. hrs.**

Reading of poetry, novels, plays, criticism, stories and history.

302 FRENCH CLASSICISM**3 sem. hrs.**

Reading of plays by Corneille, Racine and Moliere, and of selections from other seventeenth century writers.

309 FRENCH PHONETICS**2 sem. hrs.**

A scientific approach to French pronunciation. Correct formation of French sounds; practical application of the theory of phonetics to teaching.

316 FRENCH LITERATURE OF THE SIXTEENTH CENTURY**3 sem. hrs.**

Analysis of the Renaissance as it expressed itself in the leading writers of France in the 16th century.

318 MOLIERE**3 sem. hrs.**

Major comedies of Moliere.

322 FRENCH LITERATURE OF THE MIDDLE AGES (Formerly LEMOYEN AGE)**3 sem. hrs.**

A study of medieval French literature in modern French translation.

332 FRENCH LYRIC POETRY**2 sem. hrs.**

Reading of French lyrics from the 16th century to the present; study of the schools of poetry; explication de texte; oral reading.

385 SELECTED TOPICS IN FRENCH LITERATURE**3 sem. hrs.**

Intensive study of a genre, group of authors or a single major writer in French Literature. This study varies each semester. May be repeated with different content.

401 TWENTIETH CENTURY AUTHORS 1900-1945**3 sem. hrs.**

Trends in contemporary prose, with readings from the novel and the drama.

402 STYLISTICS**3 sem. hrs.**

Intensive, advanced grammar and composition, including analysis of style.

403 TWENTIETH CENTURY AUTHORS SINCE 1945**3 sem. hrs.**

A study in depth of the fiction, drama and poetry in French literature since World War II.

404 BALZAC**3 sem. hrs.**

Balzac's work with emphasis on his novels as a mirror of his time and their influence on the development of the novel as a literary form.

416 MONTAIGNE**3 sem. hrs.**

A detailed study of the life and works of Montaigne.

418 LA FONTAINE**3 sem. hrs.**

A detailed study of the life and works of LaFontaine.

420 THE AGE OF ENLIGHTENMENT**3 sem. hrs.**

Intensive and critical study in French of the major authors and work of the eighteenth century.

421 HISTORY OF FRENCH LANGUAGE**3 sem. hrs.**

Evolution of the language from its origins to the present day.

430 REALISM AND NATURALISM**3 sem. hrs.**

A detailed analysis of French literature of the late nineteenth century, including the works of Flaubert, Zola, and Baudelaire.

431 LE SYMBOLISME ET LE PARNAISSE**3 sem. hrs.**

A detailed study of French poetry in the late nineteenth century.

German Courses**302 GOETHE****3 sem. hrs.**

Reading and discussion of a number of major works, with emphasis on the drama. Prerequisite: Two courses beyond German 116.

303 SCHILLER**3 sem. hrs.**

Reading and discussion on a number of major works, with emphasis on the drama. Prerequisite: Two courses beyond German 116.

309 GERMAN PHONETICS**2 sem. hrs.**

A scientific approach to German pronunciation; correct formation of German sounds; practical application of the theory of phonetics to its teaching. Prerequisites: Two courses in German literature.

313 ADVANCED GERMAN COMPOSITION AND CONVERSATION**2 sem. hrs.**

Free discussion of topics of contemporary interest; assignment of oral and written themes based on class discussions. Prerequisites: German 213 or consent of department chairperson.

318 GOETHE'S FAUST**3 sem. hrs.**

A critical study of Parts I and II of Faust as an expression of Goethe's philosophy. Lectures, assigned readings and reports. Prerequisites: Two courses in German beyond 116.

332 GERMAN LYRIC POETRY**2 sem. hrs.**

Reading and interpretation of German lyric poetry from 800 A.D. to the present. Prerequisites: German 116 or consent of department chairperson.

385 SELECTED STUDIES IN GERMAN LITERATURE**3 sem. hrs.**

Intensive study of a genre, group of authors or a single major writer in German Literature. The field of study will vary each semester according to the interests and needs of students and the availability of instructors. Prerequisites: Two courses in German literature. Provided different material is covered, the course may be taken for credit more than once.

Latin Courses**315 HORACE: ODES AND EPODES****3 sem. hrs.**

Course not offered currently.

316 ROMAN SATIRE**3 sem. hrs.**

Course not offered currently.

318 TACITUS**2 sem. hrs.**

Course not offered currently.

319 SELECTIONS FROM THE LETTERS OF CICERO**2 sem. hrs.**

Course not offered currently.

320 SELECTIONS FROM THE LETTERS**OF PLINY****2 sem. hrs.**

Course not offered currently.

385 SELECTED TOPICS IN LATIN**LITERATURE****3 sem. hrs.**

Course not offered currently.

Spanish Courses**304 LA CIVILIZACION MEXICANA (Spanish)****2 sem. hrs.**

A study of the formation of the Mexican nation. A consideration of the development of attitudes and traditions.

309 SPANISH PHONETICS**3 sem. hrs.**

Learning, using, and teaching correct Spanish pronunciation, stress, and intonation.

310 SPANISH SYNTAX**3 sem. hrs.**

A systematic and thorough study of the fundamental points of Spanish grammar and composition.

320 METHODS OF TEACHING HIGH SCHOOL SPANISH**2 sem. hrs.**

Methods of teaching Spanish in the secondary school. Special emphasis is given to audio-lingual techniques.

331 and 332 SPANISH-AMERICAN LITERATURE**3 sem. hrs. each**

From the colonial period through realism, and from modernism to the present.

335 MEXICAN LITERATURE (Spanish)**2 sem. hrs.**

A survey of Mexican literature and its literary background from its beginnings to the present.

372 SPANISH DRAMA OF THE GOLDEN AGE**3 sem. hrs.**

Class and collateral reading of selected plays from the great dramatists of Spain's Golden Age.

385 SELECTED TOPICS IN SPANISH LITERATURE**3 sem. hrs.**

Intensive study of a genre, movement, author or work. This study varies each semester. May be repeated with different content.

411 SPANISH-AMERICAN NOVEL**3 sem. hrs.**

The Spanish-American Novel of the nineteenth and twentieth centuries with emphasis on the

most characteristic author of each period.

421 HISTORY OF THE SPANISH LANGUAGE**3 sem. hrs.**

The historical development of the Spanish language with particular attention to its phonology and morphology.

423 INTRODUCTION TO ROMANCE**LINGUISTICS****3 sem. hrs.**

The historical development of the major Romance languages with particular attention to their structure.

435 LEADERS IN SPANISH-AMERICAN THOUGHT**3 sem. hrs.**

The writers of prose — exclusive of fiction — who have shaped or influenced thought and action in Spanish America during the past two centuries from the beginning of the movement for independence to the present day.

441 LA POESIA HISPANOAMERICANA (Spanish-American Poetry)**3 sem. hrs.**

Study of the main trends of Spanish-American poetry, starting with Sor Juana Ines de la Cruz in the 17th century.

463 SEMINAR IN SPANISH LITERATURE BEFORE 1500**3 sem. hrs.**

Intensive and critical study of a major work of the period. The work studied will be varied in successive semesters.

464 SEMINAR IN GOLDEN AGE PROSE**3 sem. hrs.**

A study of the important works of the Renaissance and Baroque periods: the novel in its various forms, the short story, religious literature, moral and historical writings.

466 THE PICARESQUE NOVEL**3 sem. hrs.**

A study of the Picaresque Novel and its influence on modern world literature.

467 SEMINAR IN GOLDEN AGE POETRY**3 sem. hrs.**

Intensive and critical study of Spanish poetry from Garcilaso to Quevedo, with particular attention to Italian influences, to mysticism, to the aesthetics of the Renaissance and Baroque periods, and to the traditional forms.

468 LOPE DE VEGA AND HIS PREDECESSORS**3 sem. hrs.**

A study of the creation of national theatre by

Lope de Vega and his predecessors, with attention to the development of preceding forms of religious and secular drama, Italian influences, and the crystallization of the spirit of the Spanish Counter-Reformation. Prerequisite: Spanish Drama of the Golden Age 372.

469 THE THEATRE OF CALDERON AND HIS CONTEMPORARIES

3 sem. hrs.

Emphasis will be placed both on Calderon's late dramas and upon a critical analysis of the drama of his contemporaries. Questions to be considered: national characteristics, intellectual and religious implication, the role of the individual, problems of style and ideological interpretation. Prerequisite: Spanish Drama of the Golden Age 372.

470 DON QUIXOTE

3 sem. hrs.

Reading of the Quixote with special attention to the problems of interpretation and literary criticism.

484 SEMINAR IN CONTEMPORARY SPANISH LITERATURE

A study of the twentieth century novel, essay, poetry, or drama. The genre will be varied in successive semesters.

485 SELECTED STUDIES IN LINGUISTICS

3 sem. hrs.

Intensive study of a linguistic problem, work, or technique. Content may vary according to interest and needs of students. May be repeated with different content.

French

(See Foreign Languages)

Geography

Chairperson of the Department: John Trotter.
Office: Schroeder Hall 406.

Teaching Staff: W. Calef, R. Hart, P. Mattingly, E. J. Miller, J. Patterson, E. Schmidt, T. Searight, S. Shuman, J. Trotter.

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed. University requirements for master's degrees are described elsewhere in this catalog.

Courses

300 CARTOGRAPHY AND GRAPHICS

3 sem. hrs.

Graphic representation of statistical data, in-

cluding compilation and preparation of various types of maps and graphs.

305 AERIAL PHOTOGRAPH INTERPRETATION

3 sem. hrs.

Basic principles of photogrammetry and techniques and applications of aerial photograph interpretation.

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

Intensive study of particular lands, environments, cultures, and peoples. Prerequisite: Consent of instructor. Usually given cooperatively with other departments.

308 QUANTITATIVE METHODS IN GEOGRAPHY

3 sem. hrs.

Use and interpretation of basic statistical techniques in geographical problems.

310 TECHNIQUES OF FIELD WORK

3 sem. hrs.

Techniques of mapping and interpretation of the phenomena of the natural and cultural landscapes; original study and mapping. Field trips are required.

315 METHODS AND CONCEPTS IN AMERICAN GEOGRAPHY

2 sem. hrs.

Selected professional publications designed to acquaint the student with the development of basic concepts and methods in American geography.

320 RURAL LAND USE AND AGRICULTURAL GEOGRAPHY

3 sem. hrs.

Spatial aspects of agriculture: regionalization, distribution, and theories of location relating to crop and livestock production and other rural land uses. Prerequisite: GEO 150 or consent of instructor.

325 WORLD POPULATION AND RESOURCES

3 sem. hrs.

Population growth and resource distribution and their impacts on national policy, levels of living, food supply, and educational levels. Prerequisite: GEO 150, 205 or consent of instructor.

330 GEOGRAPHY OF TRANSPORTATION

3 sem. hrs.

Geographic analysis of systems of spatial interaction including influence of transportation on industrial location and regional development. Prerequisite: GEO 150 or consent of instructor.

335 MANUFACTURING GEOGRAPHY**3 sem. hrs.**

The structural and locational characteristics of American manufacturing industries. Prerequisite: GEO 150 or consent of instructor.

336 URBAN GEOGRAPHY**3 sem. hrs.**

Internal morphology, external relationships, and other spatial aspects of cities.

337 HISTORICAL GEOGRAPHY OF THE UNITED STATES**3 sem. hrs.**

Geography of the exploration and initial settlement of the United States, including development of distinctive regional patterns.

338 CULTURAL GEOGRAPHY**3 sem. hrs.**

Cultural processes whereby man, the organizer of space, leaves an imprint on the earth's surface. Prerequisite: Geography 135 or consent of the instructor.

340 PROBLEMS IN CLIMATOLOGY**3 sem. hrs.**

Investigation of specific problems in climatology. Prerequisite: Geography 200 or consent of instructor.

345 PROBLEMS IN CONSERVATION AND OUTDOOR RECREATION**3 sem. hrs.**

Investigation of specific problems in conservation and resource use including outdoor recreational resources. Prerequisite: Geography 205 or consent of instructor.

380 GEOMORPHOLOGY**3 sem. hrs.**

Origin, classification, description and interpretation of land forms. Prerequisite: Physical Geology 175 or consent of instructor.

401 ADVANCED CARTOGRAPHY**3 sem. hrs.**

Techniques of cartographic presentation. Compilation and construction of maps and diagrams for research and teaching. Prerequisite: Cartography and Graphics 300.

412 ADVANCED CULTURAL GEOGRAPHY**3 sem. hrs.**

The forms and processes of man's occupancy and use of his habitat within cultural regions. Examples from North America and Western Europe are presented in depth. Prerequisite: Geography 338 or consent of instructor.

415 ADVANCED URBAN GEOGRAPHY**3 sem. hrs.**

Detailed analysis of the spatial aspects of urban developments. Focus on urban morphology, and external relationships. Prerequisite: Geography 336 or consent of instructor.

420 PHYSIOGRAPHY OF NORTH AMERICA**3 sem. hrs.**

Physiographic regions of North America. Development of surface features of each area as a background for present geographic patterns of that region. Field trip required. Geology 175 or consent of instructor.

430 GEOGRAPHY OF LATIN AMERICA**3 sem. hrs.**

Intensive study of selected areas with emphasis upon settlement patterns, resources and inter-regional relations.

435 GEOGRAPHY OF WESTERN EUROPE**3 sem. hrs.**

Regional and economic development of the British Isles and continental Europe. Intensive investigations of resource, industrial, agricultural, and population patterns.

440 MEDITERRANEAN LANDS**3 sem. hrs.**

Regional survey of the physical, cultural, and economic aspects of southern Europe, the Levant, and North Africa.

445 GEOGRAPHY OF THE MIDDLE EAST**3 sem. hrs.**

Survey of the lands and peoples of southwestern Asia. Resource and population patterns of regional and political units.

450 GEOGRAPHY OF THE FAR EAST**3 sem. hrs.**

Lands and peoples of eastern Asia, with emphasis on China and Japan. International, national and regional characteristics and problems.

470 SEMINAR IN REGIONAL GEOGRAPHY**3 sem. hrs.**

Prerequisite: Advanced standing in geography or consent of instructor.

471 SEMINAR ECONOMIC-RESOURCE GEOGRAPHY**3 sem. hrs.**

Prerequisites: Economic Geography 150 and/or Conservation of Natural Resources 205 or consent of instructor.

472 SEMINAR IN PHYSICAL GEOGRAPHY**3 sem. hrs.**

Prerequisite: Consent of instructor.

473 SEMINAR IN HUMAN GEOGRAPHY**3 sem. hrs.**

Prerequisite: Consent of instructor.

491 INTERNSHIP IN COLLEGE TEACHING OF GEOGRAPHY**3 sem. hrs.**

Credit for this course is given in Curriculum and Instruction. (See Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH METHODOLOGY**1-6 sem. hrs.**

Introduction to bibliography, methods of scholarly research and the critical evaluation of research in the field. Must be taken by first year graduate students unless the department requires Curriculum and Instruction 497.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Auxiliary Courses

(Not applicable to a graduate degree program in geography.)

375 ECONOMIC GEOLOGY**3 sem. hrs.**

Earth materials of economic importance. Characteristics and uses of common metallic and non-metallic minerals and rocks. Prerequisite: Geology 175 or consent of instructor.

382 GLACIAL AND QUARTERNARY GEOLOGY (formerly GEOLOGY 425)**3 sem. hrs.**

Development of glaciers, glacial movements, deposits and landforms as background for discussion of present landscapes.

385 INVERTEBRATE PALEONTOLOGY**4 sem. hrs.**

Description, taxonomy and evolution of major-fossil invertebrate phyla; emphasis on groups with paleoecologic and stratigraphic significance. Prerequisite: GEO 180 or 275 and BSC 190 or consent of instructor. Lecture and laboratory. Field trip required.

391 OPTICAL MINERALOGY AND PETROGRAPHY**4 sem. hrs.**

Principles and techniques of petrographic microscopy in identification, description and classification of minerals and rocks. Prerequisite: GEO 280, 285. Lecture and laboratory.

395 FIELD GEOLOGY**6 sem. hrs.**

Application of geologic principles to field mapping and interpretation of the Central Rocky Mountains. Prerequisites: GEL 280, 285, 290.

Health, Physical Education, Recreation, and Dance**Acting Chairperson:** Phebe M. Scott. Office: Horton Fieldhouse 203A.**Teaching Staff:** L. Ankenbrand, B. Bass, J. Collie, V. Crafts, P. Dohrmann, C. B. Eichstaedt, C. Imel, M. Jones, W. Kauth, B. Keough, R. Koehler, R. Liverman, G. L. Mabry, R. McAdam, R. Metcalf, W. Miller, A. Nolte, J. Razor, J. Scott, P. Scott, G. Smith, K. Strand, T-K Tcheng, W. Truex, P. Wang, M. Weisbecker, B. Wilson, D. Workman.

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed. Students seeking an Ed.D. in Educational Administration may, with approval, have a concentration of credit hours in the Department of Health, Physical Education, Recreation and Dance.

Students working on a master's degree must complete at least 18 hours in Health, Physical Education, Recreation and Dance, excluding thesis credit. Programs must include from this department as follows: For a concentration in either Health or Physical Education or Recreation — 497 and 442; for a Dance concentration — 497, 460 and 469. All students have the option of completing a thesis, including creative ones, or pursuing the non-thesis comprehensive examination option. Students who select the comprehensive examination must include in their programs at least two semester hours of credit in HPR 400, Independent Study. It should be noted that approval is required for HPR 400, Independent Study, and for HPR 499, Master's Thesis; prior to taking these courses, students are to confer initially with the department Director of Graduate Studies so approval procedures can be followed. HPR 400, and HPR 499 are classified as General Courses and are described elsewhere in this bulletin.

University requirements for Master's degrees are listed elsewhere in this catalog.

Courses**304 TEACHING OF SPORTS****3 sem. hrs.**

Optimal learning in human movement: content, teacher behavior, situational conditions, analysis of sports, instructional approaches, application of research.

321 CURRENT TRENDS IN ELEMENTARY PHYSICAL EDUCATION**3 sem. hrs.**

Conceptual approach to teaching elementary physical education; integration of physical edu-

cation with classroom subjects; evaluation of children's performance. Prerequisite: HPR 221 or 222.

340 HISTORY OF PHYSICAL EDUCATION

3 sem. hrs.

Relationship, from ancient to contemporary times, of physical education to economic, political, social, educational and religious factors.

341 ORGANIZATION AND ADMINISTRATION OF HEALTH AND PHYSICAL EDUCATION

3 sem. hrs.

Administration and program development of health education and physical education in elementary and secondary schools and community colleges.

347 TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION

3 sem. hrs.

Analysis of motor performance, using objective tests, subjective ratings, and achievement tests. Construction and evaluation of knowledge tests. Use of statistical concepts for interpreting test scores.

349 APPLIED MOTOR LEARNING

3 sem. hrs.

Perceptual-motor development and performance. Application of research, learning theories and assessment tools; maturational, perceptual and performance factors.

351 EXERCISE PHYSIOLOGY

3 sem. hrs.

Utilization of human physiology in teaching physical education. Effects of exercise on body systems and physical efficiency tests and studies. Prerequisite: HPR 182.

360 TEACHING OF DANCE

2 sem. hrs.

Teaching methods in modern and folk dance forms; selection, progression, and development of dance materials for the secondary school. Prerequisite: HPR 162.

361 HISTORY AND PHILOSOPHY OF DANCE I (formerly HISTORY OF DANCE I)

3 sem. hrs.

History, philosophy, and development of dance as a social and cultural medium from primitive times through the 17th century.

362 HISTORY AND PHILOSOPHY OF DANCE II (formerly HPR 363: HISTORY OF DANCE II)

3 sem. hrs.

History, philosophy, and development of dance from the 18th century to the present. Approaches, styles, and contributions of leading dance personalities.

363 PRINCIPLES OF DANCE PRODUCTION (formerly HPR 362: PRINCIPLES OF PERFORMANCE)

3 sem. hrs.

Principles of costuming, lighting, accompaniment, and related aspects in the production of dance performances.

365 TEACHING OF FOLK FORMS OF DANCE

2 sem. hrs.

Methods of teaching folk and social dance forms in the secondary school, college, and recreational situation. Prerequisite: Previous experience in the social forms of dance (social, square, folk) or consent of instructor.

367 PROBLEMS OF DANCE

2 sem. hrs.

Current problems in teaching and administration of dance curricula; supervision of recreational and performing dance groups.

368 DANCE COMPOSITION — EXPERIMENTAL APPROACHES (formerly PRACTICUM IN COMPOSITION)

2 sem. hrs.

Progressive experiences in individual and group composition; in design, rhythm and dynamics, in various approaches to choreography. Prerequisite: Previous experience in modern dance.

369 DANCE FOR CHILDREN

2 sem. hrs.

Methods and materials in traditional and creative activities; interrelationships of dance with other arts. Prerequisite: HPR 162, 221, or 222.

370 RECREATION FOR SPECIAL POPULATIONS

3 sem. hrs.

Materials for leadership techniques for conducting recreation for special groups, including mental and physically handicapped, aged, juvenile delinquents, armed forces, prisons, and hospitals.

371 PARK MANAGEMENT

3 sem. hrs.

Planning and operational procedures in acquiring, developing, and maintaining recreation and park area facilities.

372 CAMP EXPERIENCE WITH PHYSICALLY HANDICAPPED

3 sem. hrs.

Counseling experience in a summer camp for physically handicapped children. Conferences on planning of daily activities, equipment and general program. Prerequisites: Consent of

chairperson of SED and chairperson of HPR. May be repeated.

373 WORKSHOP IN RECREATION AND CAMPING

3 sem. hrs.

Preparation of materials in crafts, music, story telling, dramatics, games and sports, with cooperative work among various departments and organizations.

374 OUTDOOR RECREATION-EDUCATION

3 sem. hrs.

Recreational use of parks and forests. Principles and policies underlying school-related programs and materials in outdoor education.

375 RECREATION AND PARK ADMINISTRATION

3 sem. hrs.

Administrative functions in the operation of organized recreation and leisure delivery systems.

382 SENSORY MOTOR EDUCATION OF TRAINABLE MENTALLY HANDICAPPED

3 sem. hrs.

Physical education activities appropriate for the trainable mentally handicapped child. Related appropriate teaching techniques are emphasized.

383 ADAPTED PHYSICAL EDUCATION

(formerly BODY MECHANICS AND CORRECTIVE PROCEDURES)

2 sem. hrs.

Methods, materials, and activities appropriate for adapted physical education programs in elementary and secondary schools. Prerequisite: HPR 282.

384 PREVENTION AND INITIAL CARE OF INJURIES

3 sem. hrs.

Responsibilities, qualifications and limitations of a trainer-coach, conditioning as a preventive measure and selected injuries, taping and treatment modalities. Prerequisite: HPR 182 or consent of instructor.

385 PHYSICAL DEFECTS-SURVEY AND REHABILITATION

3 sem. hrs.

Identification and treatment of physical defects of handicapped children; special services, equipment and procedures for school programs. Prerequisite: HPR 282. Also offered as BSC 385. Lecture and laboratory.

386 PHYSICAL EDUCATION AND RECREATION FOR HANDICAPPED CHILDREN

2 sem. hrs.

Materials and methods for planning and conducting programs for handicapped children and adolescents. Prerequisites: HPR 383 or PSY 346 and two to three hours from HPR 221, 222, 224, or 321. For teachers of HPR AND EXCEPTIONAL CHILDREN.

387 TREATMENT OF ATHLETIC INJURIES

3 sem. hrs.

Selected prevention and care items; concentrated work on therapeutic modalities, ergozenic aids and reconditioning exercises. Prerequisite: HPR 384 or consent of instructor.

390 MOOD MODIFYING SUBSTANCES AND THEIR EDUCATIONAL IMPLICATIONS

3 sem. hrs.

Psychological, social, medical, legal and economic aspects of use, misuse and abuse of substances will be explored along with the implications for education.

400 INDEPENDENT STUDY

1-4 sem. hrs.

Intensive study in a special area of the advanced student's interest under a qualified member of the faculty. A written proposal, approved by the faculty member, the student's adviser, and the department chairperson is required prior to registration.

403 PROBLEMS IN ADMINISTRATION OF SPORTS

3 sem. hrs.

Critical analysis of the current problems that confront the directors of physical education and athletics in the organization and administration of sports activities with special reference to national, state, and local control.

424 SUPERVISION OF PHYSICAL EDUCATION

2 sem. hrs.

Techniques of supervision of physical education in elementary and secondary schools; in-service training of the classroom and physical education teacher; relationships with teachers, administrators, and community.

442 PHILOSOPHY OF PHYSICAL EDUCATION

3 sem. hrs.

An examination of the philosophical bases of physical education in historical perspective and in the American culture with implications for purposes, programs, and methodology.

443 PROBLEMS IN HEALTH, PHYSICAL EDUCATION AND RECREATION**3 sem. hrs.**

Consideration of current problems in these fields as they affect the teacher of physical education; guidance in individual and group solution of selected professional problems.

447 EVALUATION IN PHYSICAL EDUCATION**3 sem. hrs.**

Methods for testing and evaluating in the school situation, interpreting data, and understanding statistics in research. Prerequisite: HPR 347 or equivalent.

448 CURRENT RESEARCH IN HEALTH, PHYSICAL EDUCATION AND RECREATION**2 sem. hrs.**

Review and critical analysis of selected research studies. Prerequisite: Introduction to Research 497.

460 SEMINAR IN DANCE**2 sem. hrs.**

Student participation in lectures, reports, demonstrations, and discussions to gain fluency in oral and written presentation while criticizing or defending concepts related to dance education; critical evaluation of pertinent research and thesis plans; reaction to points of view expressed by occasional guest lecturers.

469 MOVEMENT PHENOMENOLOGY AND PERCEPTION**3 sem. hrs.**

The phenomenon of human movement; perception-movement relationships and communication; theories of motion and muscular movement, movement behavior. Prerequisite: HPR 282.

472 CAMPING ADMINISTRATION**3 sem. hrs.**

A comprehensive study of the various principles and techniques involved in the successful administration of modern-day organization and private camps, from the perspective of the camp director.

475 ORGANIZATION AND ADMINISTRATION OF RECREATION**3 sem. hrs.**

Factors concerning the organization and administration of a recreation program; course designed to meet the needs of the administrators of town, community, or school recreational programs.

481 WORK METABOLISM**3 sem. hrs.**

An investigation of the metabolic changes that occur during exercise stress in physical edu-

cation and sport activities. Prerequisite: HPR 351 or permission of the instructor.

482 MECHANICAL ANALYSIS OF MOVEMENT**2 sem. hrs.**

Principles of physics applied to body movement; analysis of body positions and modes of locomotion; muscular and mechanical analysis of selected movement skills.

483 ADVANCED CORRECTIVE PROCEDURES**2 sem. hrs.**

Analysis of physical disabilities, handicaps and conditions of school and college students and relevant rehabilitation techniques; selected screening and evaluation techniques; the administration of adapted, corrective and therapeutic physical education programs. Prerequisite: HPR 383 or permission of the instructor.

491 INTERNSHIP IN COLLEGE TRAINING IN HEALTH AND PHYSICAL EDUCATION**3 sem. hrs.**

Credit in this course is given in Curriculum and Instruction. (See Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH METHODOLOGY**3 sem. hrs.**

Includes use of the library, problem selection, differences in research techniques, and application of statistical models to research designs.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

History

Chairperson of the Department: Gerlof D. Homan. Office: Schroeder Hall 334.

Teaching Staff: R. Austensen, R. Champagne, I. Cohen, G. Cunningham, D. Davis, C. Ekberg, J. Freed, J. Grabill, C. Gray, W. Haddad, A. Helgeson, M. P. Holsinger, N. Holt, G. Homan, F. Kohlmeyer, D. MacDonald, M. Plummer, J. Rayfield, E. Reitan, T. Sands, E. Schapsmeier, K. Sessions, L. M. Simms, Jr., L. Walker, H. Wray, W. Wyman.

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed., D.A. University requirements for these degrees are listed elsewhere in this catalog. Departmental requirements are as follows:

Master's Degree in History

The master's degree in History requires 32 semester hours of graduate credit in History and such related subjects as the graduate student adviser recommends. A student who chooses to

emphasize U.S. History must earn at least five semester hours of graduate credit in History other than U.S. History. A student who chooses to emphasize Western Civilization or the Non-Western World must earn at least five semester hours of graduate credit in U.S. History. At least 16 semester hours of credit must be at the 400 level. These 16 semester hours do not include HIS 499 (Thesis). History 497 is required of all students, and if possible should be taken in the first semester of graduate study.

Each student may choose between (1) writing a master's thesis and (2) taking a comprehensive examination. A student may receive up to six semester hours of credit for a master's thesis. Preparation of a master's thesis is of advantage to students who expect to work toward a doctor's degree and for this reason students who plan to enter a doctoral program are encouraged to write a thesis. The student who chooses the comprehensive examination will take the examination when completing the required 32 semester hours of course work. The student is also required to submit two seminar papers for evaluation at the time of the comprehensive examination.

Doctor of Arts

The Doctor of Arts in History is offered to persons seeking advanced training for teaching and curriculum leadership in colleges, community colleges, or high schools. Entry into the program requires a master's degree and successful teaching experience. Each doctoral student must complete, (a) a field in education (History Education, 8 semester hours, and Higher Education, 6 semester hours), (b) a field in history (16 semester hours), and (c) two cognate concentrations (Historical Foundations concentration, 8 semester hours, and Related Area, 8 semester hours). Included in the above are certain special courses required of all Doctor of Arts candidates: Interpretive Problems in Teaching History, Philosophy of History and Historiography, Seminar and Practicum in History Teaching, Research-Internship in the Teaching of History, and Higher Education Studies. A comprehensive oral and written examination follows completion of all course work. The final requirement of the program is a dissertation (14 semester hours) which may conform to either of the following types: **Type A**, primarily concerned with curriculum or development of instructional materials in history; **Type B**, primarily concerned with investigation of a historical topic, with reference to teaching. The normal residence requirement is one year, but commuter students who make continuing progress in the program may have the residence

requirement reduced to one semester. For additional information write to the Chairperson, Department of History, Illinois State University.

Courses

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

Consent of instructor. Usually given cooperatively with other departments. Intensive study of particular lands, environments, cultures, and peoples.

310 SEVENTEENTH CENTURY AMERICA

3 sem. hrs.

Establishment and development of the American Colonies from Jamestown to the end of the 17th Century. Special emphasis is given to Puritan New England.

311 AGE OF THE AMERICAN REVOLUTION

3 sem. hrs.

The emergence of the United States as an independent nation from 1763 to the Constitutional Convention in 1787.

317 AMERICAN CULTURAL EXPANSION AND DIPLOMACY

3 sem. hrs.

Worldwide expansion of American diplomatic, economic, cultural, and religious influence in the nineteenth and twentieth centuries.

320 LINCOLN: THE MAN AND HIS TIMES

3 sem. hrs.

Attention directed especially toward the work of Lincoln in Illinois, his leadership during the Civil War, and his relationship with people and events of his time.

321 GREAT FIGURES OF AMERICAN HISTORY

3 sem. hrs.

Personalities selected from American History. Emphasis on the contributions and lasting influence of significant individuals.

322 AMERICAN URBAN HISTORY

3 sem. hrs.

Survey of the history of the American city from 1820 to the present.

323 AMERICAN CULTURAL AND INTELLECTUAL HISTORY I

3 sem. hrs.

American progress in the fine arts, philosophy, literature and science from Puritan times to 1860.

324 AMERICAN CULTURAL AND INTELLECTUAL HISTORY II

3 sem. hrs.

The impact of naturalism, industrialization, secularization, and urbanization upon American culture since 1860.

**325 PROBLEMS IN TWENTIETH CENTURY
UNITED STATES CONSTITUTIONAL
HISTORY**
3 sem. hrs.

An examination of major problems in American constitutional history since the Progressive Era: civil rights, freedom of speech and religion, federal-state relations.

326 CASES IN BUSINESS HISTORY

3 sem. hrs.

Study of mergers, business ethics, innovations, relations with labor and government, marketing, and financing, based on the historical experience of individual companies and business leaders.

327 AMERICAN LABOR HISTORY

3 sem. hrs.

The Industrial Revolution's impact upon workers, with emphasis on the responses through unions and politics and on the role of government.

**328 AMERICAN AGRICULTURAL HISTORY
(Formerly HIS 422: HISTORY OF
AMERICAN AGRICULTURE)**

3 sem. hrs.

Focus on farming from colonial times to the present, including changing technology, land use, and economic, political and social environment.

**341 EUROPEAN INTELLECTUAL HISTORY
TO 1600**

3 sem. hrs.

The study of the ideas of the ancient world, Middle Ages, Renaissance Reformation, examined in a social, political and economic context.

**342 EUROPEAN INTELLECTUAL HISTORY
SINCE 1600**

3 sem. hrs.

A study of the ideas of the scientific revolution, enlightenment, nineteenth century and twentieth century examined in a social, political, and economic context.

**343 MODERN EUROPEAN DIPLOMATIC
HISTORY I, 1789-1890**

3 sem. hrs.

The diplomatic history of Europe from the French Revolution to the fall of Bismarck.

**344 MODERN EUROPEAN DIPLOMATIC
HISTORY II, 1890 TO PRESENT**

3 sem. hrs.

The diplomatic history of Europe from the fall of Bismarck in 1890 to the present.

**345 FRENCH REVOLUTION AND
NAPOLEONIC ERA, 1789-1815**

3 sem. hrs.

Society, culture, and government under the

monarchy; destruction of the old order: rise and fall of Napoleonic France.

351 ANCIENT NEAR EAST

3 sem. hrs.

Study of the civilizations of Mesopotamia and Egypt from the neolithic period to 500 B.C.

352 THE HELLENISTIC WORLD

3 sem. hrs.

A comprehensive study of the world bequeathed by Alexander the Great from his death in 323 B.C. to the founding of the Roman Empire.

354 MEDIEVAL RELIGIOUS HISTORY

3 sem. hrs.

A history of Christianity from Constantine to the Reformation.

356 THE ENLIGHTENMENT

3 sem. hrs.

Intellectual and social history of the western world during the eighteenth century.

360 TUDOR-STUART ENGLAND, 1485-1689

3 sem. hrs.

General survey of English history from the beginning of the Tudor dynasty to the Revolution of 1688-89.

**361 EIGHTEENTH-CENTURY BRITAIN,
1689-1815**

3 sem. hrs.

Britain from the Revolution of 1688-89 through the early Industrial Revolution and Napoleonic wars.

362 MODERN BRITAIN, 1815 TO THE PRESENT

3 sem. hrs.

A general survey of British history in the nineteenth and twentieth centuries.

365 NAZI GERMANY 1933-1945

3 sem. hrs.

The origins and nature of Nazi totalitarianism.

366 SOVIET RUSSIA, 1917 TO THE PRESENT

3 sem. hrs.

An evaluation of the origins and rise of Bolshevik power, concentrating on those economic, cultural and social developments leading to great power status.

371 MODERN LATIN AMERICA

3 sem. hrs.

The history of the Latin American countries in the last 100 years with emphasis on the twentieth century.

373 HISTORY OF MODERN CHINA

3 sem. hrs.

Concentrates on the Western and Chinese collision since the 1800's and the responses of tradition.

tional, national, and contemporary China to modernization.

375 HISTORY OF MODERN JAPAN

3 sem. hrs.

Concentrates on Japan's modernization, goals of Meiji leaders, contradictory tendencies of pre-war Japan, and contemporary Japan.

390 SOCIAL STUDIES TEACHING

METHODOLOGY

3 sem. hrs.

Designed for prospective history/social science teachers. Includes examination of social studies project materials and ways of utilizing instructional models.

401 SEMINAR IN AMERICAN HISTORY

4 sem. hrs.

402 SEMINAR IN EUROPEAN HISTORY

4 sem. hrs.

403 SEMINAR IN ASIAN HISTORY

3 sem. hrs.

411 SEMINAR: EIGHTEENTH CENTURY AMERICA

4 sem. hrs.

412 SEMINAR: THE AGE OF JACKSON

4 sem. hrs.

413 SEMINAR: THE COMING OF THE CIVIL WAR

4 sem. hrs.

414 SEMINAR: CIVIL WAR AND RECONSTRUCTION

4 sem. hrs.

416 SEMINAR: PROGRESSIVISM

4 sem. hrs.

417 SEMINAR: TWENTIETH CENTURY AMERICA

4 sem. hrs.

423 SEMINAR: AMERICAN ECONOMIC HISTORY

4 sem. hrs.

424 SEMINAR: AMERICAN CULTURAL AND INTELLECTUAL HISTORY

4 sem. hrs.

426 SEMINAR: AMERICAN CONSTITUTIONAL HISTORY

4 sem. hrs.

428 SEMINAR: AMERICAN DIPLOMACY

4 sem. hrs.

431 SEMINAR: THE OLD NORTHWEST, 1840-1880

4 sem. hrs.

432 RESEARCH PROBLEMS IN LOCAL HISTORY

4 sem. hrs.

441 SEMINAR: EUROPEAN INTELLECTUAL HISTORY

4 sem. hrs.

453 SEMINAR: THE REFORMATION

4 sem. hrs.

461 SEMINAR: EIGHTEENTH CENTURY BRITAIN

4 sem. hrs.

463 SEMINAR: MODERN FRANCE

4 sem. hrs.

466 SEMINAR: MODERN GERMANY

4 sem. hrs.

468 SEMINAR: MODERN RUSSIA

4 sem. hrs.

472 SEMINAR: TWENTIETH CENTURY LATIN AMERICA

4 sem. hrs.

477 SEMINAR: THE CONTEMPORARY MIDDLE EAST

4 sem. hrs.

496 PHILOSOPHY OF HISTORY AND HISTORIOGRAPHY

4 sem. hrs.

Examination of the philosophical bases for historical study with review of the development of historical knowledge and the historical profession.

497 INTRODUCTION TO RESEARCH METHODOLOGY

1-4 sem. hrs.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

501 INTERPRETIVE PROBLEMS IN TEACHING HISTORY

4 sem. hrs.

Examination of selected problems of historical interpretation with special emphasis upon their use in history teaching. For doctoral students or consent of instructor.

505 SEMINAR AND PRACTICUM IN HISTORY TEACHING

4 sem. hrs.

Involves students in analyzing and evaluating teaching and research findings, examining alternative goals and teaching methods, and preparing model instructional units. For doctoral students or consent of instructor.

506 RESEARCH-INTERNSHIP IN THE TEACHING OF HISTORY**4 sem. hrs.**

Involves students in analysis of research findings, a teaching internship, and planning a dissertation proposal. For doctoral students or consent of instructor.

599 DOCTORAL DISSERTATION**Variable Credit**

Home Economics and Industrial Technology

Chairperson of the Department: Joe E. Talkington. Office: Turner Hall 210.

Home Economics

Office: Turner Hall 210

Teaching Staff: J. Beno, B. Hackett, J. Karch, S. Kern, K. Smith.

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed. University requirements for the master's degree are listed elsewhere in this catalog.

The master's degree program provides opportunity for specialization in Child and Family Services, Clothing and Textiles, Food and Nutrition, Home Economics Education, and Housing and Applied Design. Courses are approved by the Home Economics Graduate Adviser. Each student may choose between: (1) 32 semester hour program which includes a thesis, (2) 32 semester hour program with a comprehensive examination, or (3) 39 semester hour program of course work. This option requires 15 semester hours in courses numbered 400 or above and enrollment in the HEC 402 seminar during the candidate's last 12 hours of course work.

Courses

301 EVALUATION IN HOME ECONOMICS**2 sem. hrs.**

Evaluation and basic principles involved; methods and techniques; individual problems. Materials charge.

304 CURRICULUM DEVELOPMENT IN HOME ECONOMICS**3 sem. hrs.**

Organization, methods, materials, and evaluation in relation to type of program and age level. Individual or group problems. Materials charge.

306 EMPLOYMENT PROGRAMS IN HOME ECONOMICS**3 sem. hrs.**

Organization, administration, and operation of home economics gainful employment programs in public schools. Materials charge.

307 THE INFANT AND TODDLER**3 sem. hrs.**

Growth and behavior of young child as related to family and other factors. Prerequisites: Psychology 111 and Home Economics 194 or consent of instructor. Materials charge.

308 ORGANIZATION AND ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS**3 sem. hrs.**

The nursery school and other educational and care units responsible for the guidance of the young child. Prerequisites: Home Economics 194 and 250 or consent of instructor. Materials charge.

313 FOOD CUSTOMS**2 sem. hrs.**

Influence of food customs of various ethnic groups on American meal patterns. Prerequisite: Home Economics 213 or consent of instructor. Materials charge.

316 FOOD INVESTIGATIONS**3 sem. hrs.**

Experimental approach to principles underlying food preparation. Prerequisite: Home Economics 213. Materials charge.

320 DEMONSTRATION TECHNIQUES**2 sem. hrs.**

Techniques and standards for demonstrations in various areas of home economics. Prerequisites: Home Economics 213 or 220. Materials charge.

322 PATTERNMAKING**3 sem. hrs.**

Making garment patterns by the flat pattern method. Prerequisite: HEC 122 or consent of instructor. Materials charge.

323 ADVANCED TEXTILES**2 sem. hrs.**

Developments in the textile field, particularly synthetic fibers and their products. Significance of the textile market for consumers. Prerequisite: Home Economics 195. Materials charge.

324 DRAPING AND DESIGN (Formerly ADVANCED COSTUME DESIGN AND DRAPING)**3 sem. hrs.**

Interpretation of garment designs in fabric

by means of the draping procedure. Body form may be constructed. Prerequisite: Home Economics 220 or consent of instructor. Materials charge.

330 DECISION-MAKING FOR CONSUMERS

3 sem. hrs.

Survey of consumer problems, trends and information. Topics include: insurance, housing, credit, life style, consumer protection, leisure and achieving financial security. Also offered as BEA 330. Materials charge.

401 SUPERVISION OF STUDENT TEACHING IN HOME ECONOMICS

3 sem. hrs.

Responsibilities of Supervising Teacher. Techniques of supervision. Preparation of supervisory materials.

402 SEMINAR IN HOME ECONOMICS

2 sem. hrs.

A seminar consists of advanced students meeting regularly under the guidance of a professor in which each student attempts original research and exchanges information, problems, and results by informal lectures, reports, and discussions. Materials charge.

406 HOUSEHOLD EQUIPMENT

2 sem. hrs.

Equipment for the modern home and home economics laboratory. Group experiences with various type of labor-saving equipment. Individual research problem. Materials charge.

408 FAMILY AND CHILD DEVELOPMENT

3 sem. hrs.

Fundamental and current problems regarding the child and family. Practice in problem-solving and committee projects. Materials charge.

409 RECENT TRENDS IN HOME ECONOMICS

2 sem. hrs.

Development as reflected in practices, methods and materials being recommended. Review of current professional literature. Materials charge.

410 FAMILY HOUSING PROBLEMS

3 sem. hrs.

Current trends in housing. Aesthetic, social, economic, and managerial aspects. Federal housing programs. Materials charge.

412 ADVANCED HOME MANAGEMENT

3 sem. hrs.

Planning, directing and coordinating human and non-human resources in the management of the home. Application of principles basic to modern household processes. Materials charge.

414 SPECIAL PROBLEMS: CLOTHING

3 sem. hrs.

Individual advanced work on several different problems or a more intensive study of one special phase of clothing. Materials charge.

416 ADVANCED PROBLEMS IN FOOD INVESTIGATION

3 sem. hrs.

Experimental study of foods and food preparation. Materials charge.

418 SELECTION OF PROCESSED FOODS

2 sem. hrs.

Study of processing methods. Appraisal of processed foods to determine practical utilization of various types. Materials charge.

420 ADVANCED NUTRITION

3 sem. hrs.

Nutrition research applied to improved dietary planning. Materials charge.

422 HISTORY OF COSTUME

3 sem. hrs.

Costume through the ages as expression of social, economic, and cultural life of time. Materials charge.

424 SELECTED PROBLEMS IN HOME ECONOMICS

1-6 sem. hrs.

Prerequisite: Consent of instructor and department coordinator. May be repeated. Materials charge.

426 ADVANCED TAILORING

3 sem. hrs.

Students tailor garments selected to provide variety of experiences using techniques that insure a professional product. Materials charge.

491 INTERNSHIP IN COLLEGE TEACHING IN HOME ECONOMICS

3 sem. hrs.

(See Curriculum and Instruction 491).

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Industrial Technology

Office: Turner Hall 210

Teaching Staff: E. Anderson, C. Bell, R. Blomgren, E. Dorner, J. Johnston, F. Kagy, F. Loepp, L. Miller, C. Porter, W. L. Quane, J. Talkington, G. Weede, E. Wiseman, W. Zook.

Programs Offered

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed. University requirements for master's degrees are listed elsewhere in this catalog.

The master's degree program provides op-

portunity for program emphasis in industrial technology, industrial education, industrial education administration, traffic education, and occupational safety. Within these broad programs a student may select courses which will lead to specialization. Each student may choose between: (1) 32 semester hour program which includes a thesis, (2) 32 semester hour program with a comprehensive examination, or (3) 39 semester hour program of course work. This option requires 15 semester hours in courses numbered 400 or above and enrollment in the seminar during the candidate's last 12 hours of course work.

Courses

300 CONTEMPORARY INDUSTRIAL EDUCATION

2 sem. hrs.

Prominent leaders and analysis of trends in industrial education. Materials charge.

301 INDUSTRIAL ARTS IN THE ELEMENTARY SCHOOL

2 sem. hrs.

Educational principles underlying industrial arts and their application in the elementary activity program. Material charge.

302 EVALUATION TECHNIQUES IN THE PRACTICAL ARTS AND OCCUPATIONAL EDUCATION

3 sem. hrs.

Historical background of measurement; examination of objectives and methods; evaluation of student abilities and growth; evaluation of facilities and equipment. Materials charge.

303 CONSTRUCTION TECHNOLOGY CURRICULUM (IACP)

4 sem. hrs.

The rationale for and the teaching and implementation of construction technology in secondary school, industrial education programs.

304 OCCUPATIONAL AND JOB ANALYSIS

3 sem. hrs.

Techniques and procedures for analyzing occupations and jobs for instructional purposes. Materials charge.

306 PART-TIME COOPERATIVE EDUCATION

3 sem. hrs.

Procedures involved in organizing and operating effective programs of cooperative vocational education. Materials charge.

307 EMPLOYMENT ANALYSIS FOR THE EXCEPTIONAL

3 sem. hrs.

Diagnosis and instruction of exceptional children who are placed in occupational education. Synthesizing employment and education for ex-

ceptional children. Also offered as Special Education 307. Materials charge.

308 MAN AND TECHNOLOGY

3 sem. hrs.

The course is designed to introduce to the student the concept of technology with emphasis on industrial technology, its growth, magnitude and its effect on mankind and basic institutions. Consideration is given to the chronology of technology, technology's effect on the world of work, contemporary technological problems and issues, and technology and the future.

309 MANUFACTURING TECHNOLOGY CURRICULUM (IACP)

4 sem. hrs.

The rationale for and the teaching and implementation of manufacturing technology in secondary schools, industrial education programs.

311 INDUSTRIAL OPERATIONS

3 sem. hrs.

A study of industrial principles, practices, and methods used to establish a sequence of operations to produce a product.

319 COMPUTER GRAPHICS

3 sem. hrs.

Combination of graphic techniques and computer programming as means of industrial communication applied to solution and interpretation of technological problems. Materials charge. Also offered as INF 319.

320 MASONRY CONSTRUCTION

4 sem. hrs.

Theory, materials and practices of concrete and masonry construction. Practical experience through on-site activities. Prerequisite: IT 221 or consent of instructor.

321 CARPENTRY CONSTRUCTION

4 sem. hrs.

Theory, materials and practices of the building construction industry. Practical experience through on-site activities including carpentry and related trades. Prerequisite: IT 221 or consent of instructor.

325 INDUSTRIAL PLASTICS

3 sem. hrs.

Resins, processing, and fabrication; injection molding, extrusion, rotational molding, foaming, thermo-forming, identification and testing. Prerequisite: Industrial Technology 192 or consent of instructor. Materials charge.

331 MACHINE TOOL TECHNOLOGY III

4 sem. hrs.

Theory and practice involving setups for

production machining: numerical control machine programming, turret lathe applications, production processes, technical reports. Prerequisite: Industrial Technology 233 or consent of instructor. Materials charge.

332 APPLIED PHYSICAL METALLURGY

3 sem. hrs.

Physical and mechanical properties of metals, testing properties, crystalline structure, metallurgical examination, constitution of alloys, heat treatment, industrial applications. Prerequisite: Industrial Technology 192 or consent of instructor. Materials charge.

346 INDUSTRIAL ELECTRONICS

3 sem. hrs.

Operation and characteristics of electronic circuits and devices employed in non-communications applications. Prerequisite: Industrial Technology 242 or 244. Materials charge.

349 TECHNICAL WRITING

3 sem. hrs.

Instruction and practice in the forms and techniques of technical writing, adapted wherever possible to the professional interests of the individual student. Prerequisites: English 101 or consent of instructor. Also offered as English 349.

351 IMAGE CARRIERS AND IMAGE TRANSFER

3 sem. hrs.

Laboratory practice of basic printing machines; theory of printing machine systems, trouble-shooting and plate and plate-making systems. Prerequisite: Industrial Technology 250 or consent of instructor. Materials charge.

352 CHARACTER GENERATION

3 sem. hrs.

Theory, laboratory practice on photo composition, impact and hot metal machines. Cathode-ray tube and computer application. Prerequisite: Industrial Technology 250 or consent of instructor. Materials charge.

353 COLOR SEPARATION

3 sem. hrs.

Theory of color, modern color separation methods, fake color, transmission and reflection copy, color correction, additive and subtractive color. Prerequisite: Industrial Technology 253 or consent of instructor. Materials charge.

354 THE GRAPHIC ARTS INDUSTRY

3 sem. hrs.

Graphic arts industrial organization of human resources, physical assets, and money; efficient production of graphic communications

products. Prerequisite: Industrial Technology 250 or consent of instructor. Materials charge.

356 OCCUPATIONAL HEALTH FOR SAFETY PROFESSIONALS

3 sem. hrs.

Not for credit Env. Health maj.-min.

A study of the relationships, effects, and methods of control of chemical, microbiological, radiological, and physical hazards and stresses on the health, efficiency, and well-being of employees. Also offered as AHP 356.

361 MOTOR VEHICLE DIAGNOSIS

3 sem. hrs.

Motor vehicle systems diagnosis; emphasis on electrical and fuel systems; experience on mechanical systems. Prerequisites: Industrial Technology 261 and 262 or consent of instructor. Materials charge.

363 FLUID POWER SYSTEMS DESIGN AND ANALYSIS

3 sem. hrs.

Design, sizing and analysis of hydraulic and pneumatic circuits including both machine tool and mobile applications. Prerequisite: Industrial Technology 263 or consent of instructor. Materials charge.

370 INDUSTRIAL ACCIDENT PREVENTION

3 sem. hrs.

Principles, responsibilities and techniques for developing, organizing, implementing and administering an industrial safety program. Materials charge.

371 ALCOHOL AND ACCIDENT PHENOMENA

3 sem. hrs.

Effects of alcohol on accident causation. Psychological, physiological, pharmacological actions of alcohol in view of medical, sociological, religious, economic aspects. Materials charge.

372 ACCIDENT INVESTIGATION, RECORDS AND EVALUATION

3 sem. hrs.

Theory and function of accident investigation, reporting and analysis systems. Form design and utilization and cost evaluation procedures. Materials charge.

373 AGRICULTURAL ACCIDENT PREVENTION

3 sem. hrs.

Major problems of accident causation and prevention applicable to agriculture and the need for farm safety education. Also offered as Agriculture 345. Materials charge.

374 METHODS AND MATERIALS OF TEACHING DRIVER EDUCATION**3 sem. hrs.**

Laboratory experience in teaching beginning drivers using driving simulation and dual-control on the street, organization and administration of Traffic Safety programs. Prerequisite: IT 172. Laboratory experience in teaching beginning drivers in traffic simulators. BTW will be arranged. Materials charge.

375 TRAFFIC ENFORCEMENT**2 sem. hrs.**

Philosophy, methods of detecting, apprehending violators. Fundamentals of traffic law applicable to laymen, technicians, and teachers. Prerequisite: Industrial Technology 172 or concurrent registration or consent of instructor. Materials charge.

376 PROBLEMS AND RESEARCH IN ACCIDENT PREVENTION**3 sem. hrs.**

Problems confronting researchers in the safety field; current findings, applicable to the students' area of interest. Prerequisite: Industrial Technology 171 or consent of instructor. Materials charge.

377 TRAFFIC ENGINEERING**2 sem. hrs.**

Investigation of vehicle and environmental components of HTS; vehicle inspection, equipment, design; traffic studies performed; traffic planning to reduce collisions, congestion. Prerequisite: Industrial Technology 172 or concurrent registration, or consent of instructor. Materials charge.

378 DISASTER PREPAREDNESS**3 sem. hrs.**

Organizing, directing, coordinating disaster services in schools, industry and local government. Includes T.B.A. 48 hr. disaster exercise. Materials charge.

379 CURRICULUM DEVELOPMENT IN DRIVER EDUCATION**3 sem. hrs.**

Behavioral-oriented curriculum applicable to driver education. Behavioral objectives, learning activities, measurement of student performance peculiar to driver education. Prerequisites: Industrial Technology 171 and 172. Materials charge.

380 FIRE PROTECTION AND PREVENTION**4 sem. hrs.**

Measures related to safeguarding human life and preservation of property in prevention, detection, extinguishing fires. Prerequisite: Indust-

rial Technology 171 or consent of instructor. Materials charge.

383 ADVANCED DRIVER EDUCATION PROGRAMS**2 sem. hrs.**

Prerequisites: Valid drivers license, junior standing, and IT 374 or consent of instructor. Lecture and laboratory. Techniques for teaching and dealing with common emergency situations in driving.

386 TECHNICAL COMPUTER PROGRAMMING**3 sem. hrs.**

Digital computer systems, programming digital computers and their use in solving problems related to applied sciences and technologies. Laboratory arranged. Materials charge. Also offered as INF 386.

401 FOUNDATIONS OF INDUSTRIAL EDUCATION**3 sem. hrs.**

Underlying movements and philosophies which have influenced the development of industrial education. Materials charge.

402 ORGANIZATION AND ADMINISTRATION OF THE PRACTICAL ARTS AND OCCUPATIONAL EDUCATION**3 sem. hrs.**

Problems confronting the teacher and administrator; basis for their solution. Materials charge.

403 SEMINAR IN INDUSTRIAL TECHNOLOGY**2 sem. hrs.**

A seminar consists of advanced students meeting regularly under the guidance of a professor in which each student attempts original research and exchanges information, problems, and results by informal lectures, reports, and discussions. May be repeated to total of six hours. Materials charge.

404 SPECIAL PROJECTS IN INDUSTRIAL TECHNOLOGY**1-3 sem. hrs.**

Investigation of selected areas of industrial technology or accident prevention. Laboratory work may be included. Prerequisite: File plan with adviser, gain consent of instructor prior to enrollment. May be repeated to total of six hours. Materials charge.

405 PHILOSOPHY OF THE PRACTICAL ARTS AND OCCUPATIONAL EDUCATION**3 sem. hrs.**

Philosophical bases for practical arts and occupational education. Materials charge.

470 CONCEPTUAL MODELS OF ACCIDENT PREVENTION

4 sem. hrs.

Man-machine relations: factors which influence or impair machine-human functions resulting in systems failure. Materials charge.

491 INTERNSHIP IN COLLEGE TEACHING IN INDUSTRIAL EDUCATION

3 sem. hrs.

(See Curriculum and Instruction 491).

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Information Sciences

Acting Chairperson of the Department: John F. Cragan. Office: Stevenson 116-B.

Teaching Staff: J. Boaz, R. Brake, J. Cragan, R. Holdridge, W. Holdridge, D. Hustuft, T. Jackson, S. Johnson, S. Kapoor, C. Konsky, S. Rives, W. Semlak, R. Smith, C. E. Streeter, T-H Tcheng, G. Tuttle, C. White, W. Williams, R. Wiman, F. Wisely, D. Wright.

The department offers work leading to the M.A., M.S. and M.S. in Ed. degrees in Speech Communication and to the M.S. and M.S. in Education degrees in Instructional Media.

Speech Communication offers areas of emphasis in the general communication theory, organizational communication, persuasion, group communication process and leadership, contemporary communication criticism, minority group communication problems, communication education, language behavior and mass communication.

The Instructional Media program also allows the student to obtain his degree by taking the comprehensive examination or writing a thesis. The following course or its equivalent is prerequisite to the program: Information Science 240 — depending on the student's interest or needs.

The Instructional Media program offers three areas of emphasis: (1) Production of Instructional Materials, (2) Administration of Media Programs, (3) Communication Theory and Research.

University requirements for the above degrees are listed elsewhere in this catalog.

Information Sciences

Courses

301 ADVANCED REFERENCE SOURCES

3 sem. hrs.

The selection, use, and evaluation of print and non-print reference materials in selected subject field.

305 BUILDING AND MAINTAINING LIBRARY COLLECTIONS

3 sem. hrs.

A survey of general selection aids, principles of selection, criteria for evaluation. Development of a materials selection policy, intellectual freedom and censorship.

306 LIBRARY MATERIALS FOR CHILDREN

3 sem. hrs.

Selection, evaluation and use of media in various subject areas. Use of materials in meeting individual interests, needs, and abilities of children.

307 MEDIA FOR YOUNG ADULTS

3 sem. hrs.

Selection, evaluation and use of media for young adults in public and secondary school libraries. Materials are related to development of young people and to the school curriculum.

308 LIBRARY MATERIALS FOR ADULTS

3 sem. hrs.

Evaluation, selection, and use of media for adults. A study and analysis of interests and information needs.

310 ORGANIZATION OF LIBRARY MATERIALS

4 sem. hrs.

Principles of cataloging and classification and their application in organizing media collections; Dewey Decimal Classification System and the Anglo-American cataloging code. Supervised laboratory work.

312 ADMINISTRATION OF THE LIBRARY MATERIALS CENTER

3 sem. hrs.

Principles and procedures in developing, directing, and evaluating library media services.

319 COMPUTER GRAPHICS

3 sem. hrs.

Combination of graphic techniques and computer programming as means of industrial communication applied to solution and interpretation of technological problems. Also offered as IT 319. Materials charge.

326 LIBRARY SERVICES FOR SPECIAL GROUPS

3 sem. hrs.

Trends in the development of services, primarily by public libraries in the United States and in Illinois, for groups with unique needs.

327 SPECIAL LIBRARIES

3 sem. hrs.

Survey of the services and functions of the major types of special libraries. Supervised field trips.

337 PROGRAMMED LEARNING

3 sem. hrs.

Construction and evaluation of programmed

instruction; critical analysis of learning theory as it relates to this form of instruction. Methods of using programmed sequences for instruction.

340 COMPUTER APPLICATIONS IN EDUCATION

3 sem. hrs.

Examination and discussion of the ways computers may be used in education. Administration, instruction, research, storage of information, accounting and simulation. Consent of instructor. Formerly LSM 450.

345 INTRODUCTION TO LIBRARY TECHNOLOGY

3 sem. hrs.

Application of mechanized, automated and computerized equipment to achieve economy, efficiency and speed in library operations. Analysis and design of library systems.

350 EVALUATION AND COLLECTION OF MAP RESOURCES, ATLASES AND AERIAL PHOTOGRAPHS

3 sem. hrs.

Selection, acquisition, conservation, storage and circulation of map materials. Criteria for evaluating maps and atlases. Formerly LSM 330.

360 MASS COMMUNICATION: THEORY AND EFFECTS

3 sem. hrs.

A critical examination of channel and receiver variables and their effects on the act of moving information through a given medium. Students participate in at least one research project of their design. Prerequisites: INF 110, 160.

361 REGULATION OF THE COMMUNICATION INDUSTRY

3 sem. hrs.

The legal background of mass media, specific laws affecting media operations, and industry efforts at self regulation. Prerequisite: INF 160. Formerly: LAW AND REGULATION OF MASS COMMUNICATION. Lecture and laboratory.

362 INSTRUCTIONAL TELEVISION

3 sem. hrs.

Television as a means of instruction in terms of research, technique, utilization and evaluation. Lecture and laboratory.

364 BROADCAST MANAGEMENT

3 sem. hrs.

The role and functions of broadcast media managers in society. Prerequisites: INF 160, 264, 361.

365 FUNDAMENTALS OF GRAPHIC PRODUCTION

3 sem. hrs.

Fundamental skills and techniques for mounting, lettering, coloring, illustrating and reproducing graphic materials. Prerequisite: INF 240 or consent of instructor. Lecture and laboratory. Materials charge.

366 GRAPHIC DESIGN AND PRODUCTION

3 sem. hrs.

Design and practice in the application of skills and knowledge to specific production problems. Student must integrate skills, knowledge of materials, design, and communication theory. Prerequisites: INF 241 and 365 or consent of instructor. Lecture and laboratory. Materials charge.

367 AUDIO PRODUCTION

3 sem. hrs.

Selection, evaluation, production, operation and maintenance of audio devices and materials. Lecture and laboratory. Materials charge.

368 MOTION PICTURE PRODUCTION

3 sem. hrs.

Theory and practice in planning and producing motion pictures. Considers treatments, storyboard, script writing, shooting, editing, titling and technical problems of production. Student provides film and processing. Lecture and laboratory. Materials charge.

380 DIRECTED PROJECTS

1-3 sem. hrs.

Also offered as SP 380.

385 EDITORIAL AND FEATURE WRITING

3 sem. hrs.

Advanced training in writing feature articles and editorials for newspapers and magazines. Prerequisite: Consent of instructor.

386 TECHNICAL COMPUTER PROGRAMMING

3 sem. hrs.

Digital computer systems, programming digital computers and their use in solving problems related to applied sciences and technologies. Also offered at IT 386. Laboratory arranged. Materials charge.

433 ADMINISTRATION OF MEDIA CENTERS

3 sem. hrs.

Principles and practices of organizing and managing instructional media programs in school systems, colleges, business and industry. Considers services, facilities, budgeting, personnel, public relations, and evaluation.

434 RESEARCH IN INSTRUCTIONAL MEDIA**3 sem. hrs.**

Critical analysis of selected research studies in institutional communications and technology. Research methods and sources of data in major categories of media research.

435 INSTRUCTIONAL SYSTEMS DEVELOPMENT**3 sem. hrs.**

Involves specific identification of an instructional problem; analysis of the resources and alternatives; and the synthesizing procedures toward an effective solution. Cross-listed in Curriculum and Instruction.

436 INSTRUCTIONAL MESSAGE DESIGN**3 sem. hrs.**

Planning and designing mediated instructional messages. Concepts developed are applied to the production and evaluation of a selected design problem. Prerequisites: Information Science 241, 365, 367, 368 and 435.

493 SEMINAR IN MASS COMMUNICATION

See Speech Communication 493.

497 INTRODUCTION TO RESEARCH METHODOLOGY

See Speech Communication 497.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Speech Communication**Courses****302 COMMUNICATION CRITICISM****3 sem. hrs.**

The course develops critical skills for describing, interpreting and evaluating communication from different theoretical perspectives. Prerequisite: INF 110 or consent of instructor. Formerly SP 327.

303 CONTROVERSY AND CONTEMPORARY SOCIETY**3 sem. hrs.**

Contemporary communication on current significant, controversial issues. Prerequisite: INF 110 or consent of instructor.

304 FREEDOM OF SPEECH AND PRESS**3 sem. hrs.**

A study of First Amendment rights. Emphasis on Supreme Court decisions relating to political dissent, obscenity, provocation and demonstration, and press freedom. Prerequisites: INF 110 or consent of instructor.

321 MESSAGE COMPOSITION**3 sem. hrs.**

The application of communication theory and research to the composition of informative and persuasive messages. Emphasis: organizational and language factors affecting mediated and non-mediated communication. Prerequisite: INF 110 or consent of instructor.

323 THEORY AND RESEARCH IN SMALL GROUP COMMUNICATION**3 sem. hrs.**

Theoretical and experimental literature dealing with small group communication processes. Prerequisite: INF 110 or consent of instructor.

324 THEORY AND RESEARCH IN PERSUASION

A survey of contemporary theoretical and empirical literature leading with the question of how an individual's attitudes, beliefs, and solid behaviors are affected by communication. Prerequisite: INF 110 or consent of instructor.

328 CONTEMPORARY RHETORICAL THEORY**3 sem. hrs.**

Recent rhetorical theories and theorists are discussed and evaluated.

329 ORGANIZATIONAL COMMUNICATION**3 sem. hrs.**

An examination of theoretical and experimental literature dealing with communication in an organizational setting. Prerequisite: INF 110 or consent of instructor.

330 DIRECTING THE FORENSIC PROGRAM**3 sem. hrs.**

Theoretical and procedural aspects of organizing and maintaining a debate and individual speaking events program. Prerequisite: INF 110 or consent of instructor.

370 PSYCHOLOGY OF LANGUAGE**3 sem. hrs.**

Theories and experimental research relating to the development and functions of language. Prerequisite: INF 110 or consent of instructor.

371 POLITICAL COMMUNICATION**3-4 sem. hrs.**

Basic theory and research relating to political campaign communication. Special attention is paid to the persuasive process of political campaigning focusing upon the role of the media, the candidate, image creation and other selected topics on political campaign communication. Prerequisite: 6 hrs. INF and 6 hrs. POS or consent of instructor.

380 DIRECTED PROJECTS**1-3 sem. hrs.**

Supervised practical professional experience under the guidance of professionally qualified personnel. Prerequisite: Consent of instructor.

381 PROBLEMS IN THE TEACHING OF COMMUNICATION**3 sem. hrs.**

Identification of common and unique problems in teaching communication concepts and skills. Approaches to resolving classroom problems. Prerequisite: INF 110 or consent of instructor.

422 PROSEMINAR IN COMMUNICATION**3 sem. hrs.**

Introduction to theory and empirical research in communication. Includes units on empirical research; methods in communication; an overview and analysis of the process of communication in general; theory and research in language behavior; the analysis of individual units of communication; and theory and research dealing with the special consideration imposed by group size, group complexity and the available media. Must be taken by first year graduate students who have not had equivalent course.

423 THE PROCESS OF COMMUNICATION**3 sem. hrs.**

Studies the process of communication as it occurs between individuals, small groups, in organizations and in mass societies. Covers theoretical and research literature from the fields of speech, psychology, sociology and communication. Not open to majors in the department.

424 SEMINAR IN PERSUASION**3 sem. hrs.**

The examination of selected areas of theory and research in persuasion. Prerequisite: SP 324 or consent of instructor.

481 SEMINAR IN COMMUNICATION EDUCATION**3 sem. hrs.**

Examination of recent developments in theory and research in communication education.

491 INTERNSHIP IN COLLEGE TEACHING IN COMMUNICATION**3 sem. hrs.**

Credit for the course is given in Curriculum & Instruction (see Curriculum & Instruction 491.)

492 SEMINAR IN COMMUNICATION THEORY**3 sem. hrs.**

Advanced examination of selected areas of communication theory. Prerequisite: Consent of instructor.

493 SEMINAR IN MASS COMMUNICATION**3 sem. hrs.**

May be repeated to a total of six semester

hours if different material is covered. Prerequisite: Information Science 360 or consent of instructor.

494 SEMINAR IN SMALL GROUP COMMUNICATION**3 sem. hrs.**

May be repeated to a total of six semester hours if different material is covered. Prerequisite: Speech Communication 323 or consent of instructor.

495 SEMINAR IN ORGANIZATIONAL COMMUNICATION**3 sem. hrs.**

May be repeated to a total of six semester hours if different material is covered. Prerequisite: Speech Communication 329 or consent of instructor.

496 SEMINAR IN RHETORICAL THEORY**3 sem. hrs.**

May be repeated to a total of six semester hours if different material is covered.

497 INTRODUCTION TO RESEARCH METHODOLOGY**3 sem. hrs.**

Introduction to methods of scholarly research and the critical evaluation of research in communication. Must be taken by first year graduate students. May be repeated to a total of six semester hours by advanced students as they pursue special research problems.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Mathematics

Acting Chairperson of the Department: Albert D. Otto. **Office:** Stevenson Hall 313.

Teaching Staff: K. Berk, F. Brown, L. Brown, R. Crumley, S. Clemens, J. Dossey, O. Edge, L. Eggan, S. Friedberg, K. Ha, R. Hathaway, J. Horner, A. Insel, C. Morris, P. O'Daffer, A. Otto, J. Parr, M. Powers, K. Retzer, R. Ritt, T. Shilgalis, R. Speiser, L. Spence, C. Thornton, C. Vanden Eynden.

Programs Offered

The Department of Mathematics offers selected programs of graduate work leading to the Master of Arts, Master of Science, Master of Science in Education and Doctor of Arts. These programs, determined by the student and the adviser, reflect the recognized need for creative teachers of mathematics at all levels, for innovative research mathematicians, and for qualified persons in the field of statistics, computer science, and applied mathematics.

Master's Degree Programs

For the degrees of Master of Arts and Master of Science, the student must meet the general university requirements listed elsewhere in this catalog. For the degree Master of Science with a 39 hour option see below.

Before completion of the degree, the student is required to: (a) take 315 and 317; (b) take at least one of the courses from each of the sequences 312-313; 347-348; 350-351; and (c) complete at least one of the sequences in (b). Students are encouraged to take 316 and to complete all three of the sequences in (b). Entering students will be expected to have completed at least three of the courses in (a) and (b) in their undergraduate work. Courses equivalent to those above will be accepted. Students may elect either of the two following options.

Option I: Of the 39 hours required, at least 30 must be in mathematics, except by permission of the department chairperson. At least 15 of the 39 must be at the 400 level, with at least 10 of these in mathematics, including three in algebra or analysis. Neither a thesis nor a comprehensive examination is required, but the student must maintain a 3.2 grade point average.

Option II: Of the 32 hours required, at least 24 must be in mathematics, except by permission of the department chairperson. Either a comprehensive examination or an oral presentation is required. Complete information is available from the mathematics office.

The following courses, listed according to career interest, are recommended as electives in the program of a candidate for the degree of Master of Arts or Master of Science.

- (1) Further graduate work in mathematics: 321, 407, 408, 445, 447, 448, 449, 470, 471.
- (2) Mathematics education: 310, 320, 321, 323, 362, 421, 422, 430.
- (3) Statistics: 450, 451, 452, 453, 455, 458.
- (4) Industry or Government:
 - (a) computer science 366, 383, 384, 370, 372, 463.
 - (b) applied mathematics: 335, 340, 341, 370, 440, 441.

For the degree of Master of Science in Education with a major in mathematics, the student must meet the general university requirements listed on pages 17-18 and must fulfill the requirements of either the College Teaching Program or the Secondary Teaching Program as listed on page 18. Upon completion of the degree the student must have had courses numbered 300 or above in algebra, analysis, geometry,

and mathematics education. Courses in statistics and number theory are highly recommended. The student's adviser along with the student will tailor the program to meet the background and needs of the student.

Either a comprehensive examination or a thesis or an oral presentation is required. If the thesis or oral presentation is elected, the student will work with an adviser in a selected area of interest. It should be noted that in the College Teaching Program option the preparation is usually for the teaching of lower-division college courses in mathematics.

A number of teaching assistantships and faculty assistantships are available. Inquiries should be directed to the chairperson of the Mathematics Department.

Doctor of Arts Programs

A doctoral program offered to persons seeking advanced training for teaching in the community college or in the four year college. Admission to the program ordinarily requires previous successful teaching experience and a level of mathematical training equivalent to a master's degree in mathematics or mathematics education.

Candidates for admission who do not meet these requirements or whose career objective is related to teaching in four year colleges will be considered on an individual basis and may require a personal interview.

Each candidate will be expected to complete a dissertation which is original and has relevance to the profession of teaching in the community college. The prospectus for the dissertation can be officially considered and accepted by the department only after the student has passed his Qualifying Evaluation; to pass this Evaluation each student must demonstrate substantial competence in 1) Algebra, 2) Real and Complex Analysis, 3) Geometry or Topology, 4) Mathematics Education, and 5) an approved elective area. This competence may be demonstrated in each area by either one of two methods: a) completion of the appropriate courses with grades of A, or b) passing a qualifying examination. In addition, the student must complete an approved instructional sequence in applied mathematics or associated discipline. Each student will be expected to demonstrate academic proficiency in at least four of the seven units in the Higher Education Sequence for which the student will receive a maximum of six hours credit. The student will be expected to fulfill all the requirements of the Graduate College.

Courses**301 MATHEMATICAL TOPICS FOR ELEMENTARY TEACHERS****3 sem. hrs.**

Significant problems, viewpoints and trends in teaching of arithmetic. Research related to organization, content and techniques in this field. Prerequisite: MAT 151 or consent of instructor. Not for credit maj min. Resource center fee.

302 MATHEMATICAL TOPICS FOR JUNIOR HIGH TEACHERS**2 sem. hrs.**

Problems, viewpoints and trends in teaching junior high school mathematics. Implication of logic and foundations of mathematics for teaching in this field. Prerequisite: MAT 201 or 202 or teaching experience, not for credit maj min. Resource center fee.

303 DIAGNOSIS AND REMEDIATION OF ELEMENTARY MATH LEARNING PROBLEMS**3 sem. hrs.**

Analysis of Diagnostic and Remediation Procedures utilizing concrete materials for children experiencing difficulties in elementary school mathematics. Prerequisite: MAT 151 and 201 or consent of instructor. Resource center fee.

306 SET THEORY**3 sem. hrs.**

Elementary logic, set algebra, relations and functions, axioms for set theory, equivalence, ordinals and cardinals. Prerequisite: MAT 251 or 175.

308 MATRIX THEORY**2 sem. hrs.**

Computational theory of matrices, matrix operations, inversion, solution to linear systems, eigenvalues and eigenvectors. Prerequisites: MAT 220, or 175 and FORTRAN or PL/1.

310 NUMBER THEORY**3 sem. hrs.**

Divisibility, primes, unique factorization, numerical functions, congruences, Diophantine equations, other topics. Prerequisite: MAT 116 or 175.

312 HIGHER GEOMETRY I**3 sem. hrs.**

Investigation of affine and projective geometry from an algebraic standpoint; metric structures. Prerequisite: MAT 175 or 251.

313 HIGHER GEOMETRY II**3 sem. hrs.**

Topological transformations on the Euclidean

plane; projective plane; synthetic and analytic projective geometry, projective conics. Prerequisite: MAT 312.

315 INTRODUCTION TO ABSTRACT ALGEBRA I**3 sem. hrs.**

Introduction to rings, including integers, fields, polynomials, homomorphisms, ideals, quotient rings, factorization, irreducibility, Prerequisite: MAT 251 or 175.

316 INTRODUCTION TO ABSTRACT ALGEBRA II**3 sem. hrs.**

Introduction to groups, including permutation, symmetry and matrix groups, homomorphisms, normally, quotient groups, applications. Prerequisite: MAT 315.

317 LINEAR ALGEBRA**4 sem. hrs.**

Vector spaces, linear transformations, dual space, inner product spaces, eigenvalues and eigenvectors, rational and Jordan canonical forms, quadratic and bilinear forms. Prerequisite: MAT 175 or 251.

320 HISTORY OF MATHEMATICS TO 1600**2 sem. hrs.**

Emphasis on Greek geometry, and growth of algebra and algebraic notation from early Mesopotamia through Renaissance. Prerequisite: MAT 116 or 136.

321 HISTORY OF MATHEMATICS, 1600 TO PRESENT**2 sem. hrs.**

Development of modern mathematics (analysis, algebra, geometry) and the people in the forefront, beginning with Descartes. Emphasis on 19th century. Prerequisite: MAT 175 or 251.

323 MATHEMATICS FOR THE SECONDARY SCHOOL**3 sem. hrs.**

Problems in selection, placement and teaching of secondary mathematics topics. Language and symbolism. Analysis of recent trends and practices. Prerequisites: MAT 211 and 315 or conc reg. Resource center fee.

325 FINITE MATHEMATICAL STRUCTURES**2 sem. hrs.**

Methods of proof, finite algebra, partition and counting, stochastic processes, matrix algebra, theory of games and linear programming application. Prerequisite: MAT 116 or 175.

335 ADVANCED CALCULUS I**3 sem. hrs.**

Calculus of functions of several variables; Taylor's series of several variables, maxima and minima, Lagrange multipliers, multiple integration, Green's and Stoke's theorems. Prerequisite: MAT 117 and 175, or MAT 231, or MAT 251.

336 ADVANCED CALCULUS II**3 sem. hrs.**

Content will vary. Topics may include introduction to Fourier series or differential geometry. Prerequisite: MAT 335.

340 DIFFERENTIAL EQUATIONS I**3 sem. hrs.**

First order differential equations, linear differential equations, series solutions, systems of linear differential equations, applications. Prerequisites: MAT 175 or MAT 251 or consent of instructor.

341 DIFFERENTIAL EQUATIONS II**3 sem. hrs.**

Numerical solutions, Laplace transform, theory of first order equations, theory of linear differential equations, Sturm theory, Sturm Liouville theory, Fourier series, introduction to partial differential equations with applications to the heat and wave equations. Prerequisites: MAT 340 and 117, or 231, or 251.

347 INTRODUCTION TO REAL ANALYSIS I**4 sem. hrs.**

The real number system, topology of metric spaces, sequences, continuous functions, uniform convergence, differentiation, Taylor's Theorem, Riemann integration, the fundamental theorem of calculus, infinite series, power series, the implicit function theorem. Prerequisite: MAT 231 and 251 or 117 and 175.

348 INTRODUCTION TO REAL ANALYSIS II**3 sem. hrs.**

Differentiation, Taylor's theorem, Riemann-Stieltjes integration, uniform convergence, Stone-Weierstrass theorem, power series expansions, Fourier series. Prerequisite: MAT 347.

349 COMPLEX ANALYSIS I**3 sem. hrs.**

Analytic function theory, complex plane, differentiability and analyticity, Cauchy's theorem. Taylor series and Laurent series. Prerequisite: MAT 117 and 175, or MAT 231 or MAT 251.

350 MATHEMATICAL STATISTICS I**3 sem. hrs.**

Sample spaces, random variable, frequency functions, linear functions of random variables,

nature of statistical functions, moment generating function, applications. Prerequisite: MAT 117 or consent of instructor.

351 MATHEMATICAL STATISTICS II**3 sem. hrs.**

Correlation and regression equations, development of Chi-square. Student's t and F distributions, likelihood ratio tests, analysis of variance and non-parametric methods. Prerequisite: MAT 350.

362 COMPUTER-EXTENDED MATHEMATICS FOR SECONDARY SCHOOLS**3 sem. hrs.**

Techniques of illustrating, deriving, and discovering mathematical concepts of the secondary curriculum by digital computer. Prerequisites: Calculus and C in MAT 168 or knowledge of programming.

366 BOOLEAN ALGEBRA AND LOGICAL DESIGN**3 sem. hrs.**

Switching circuits, Boolean algebra as model for propositional calculus, logical design of digital computers, logical programming. Prerequisite: MAT 116, 175 or 121.

370 NUMERICAL ANALYSIS**3 sem. hrs.**

Interpolation and approximation, error analysis, integration, techniques for solving differential equations, root finding, matrix manipulation. Prerequisites: MAT 175, 308.

372 INTRODUCTION TO FINITE AUTOMATA AND FORMAL LANGUAGES**3 sem. hrs.**

Finite deterministic automata including sequential and 2-way multitape automata. Formal languages and grammars, general systems theory. Prerequisite: MAT 315 or consent of instructor.

375 INTRODUCTION TO TOPOLOGY**3 sem. hrs.**

Topology of metric spaces, introduction to general topological spaces, and other topics. Prerequisites: MAT 175 and 117, or MAT 231 or MAT 251.

383 PRINCIPLES OF OPERATING SYSTEMS**3 sem. hrs.**

Functional criteria for operating system design. Job management, task management, data management, resource allocation and dump and trace facilities. Prerequisites: MAT 283, 284.

384 EXTERNAL DATA STRUCTURES**3 sem. hrs.**

Data structures for processing files using mass storage devices; physical and functional device characteristics; access methods and utilities; control language(s). Prerequisites: MAT 284 or a two-semester sequence in a computer language or consent of instructor.

390 INDEPENDENT STUDY**1-3 sem. hrs.****407 ABSTRACT ALGEBRA I****3 sem. hrs.**

Group theory including the Sylow theorems and other advanced topics. Ring theory. Prerequisite: Mathematics 316 or consent of instructor.

408 ABSTRACT ALGEBRA II**3 sem. hrs.**

Modules with the canonical decomposition theorems. Field and Galois theory. Prerequisite: Mathematics 407 or consent of instructor.

410 NUMBER THEORY**3 sem. hrs.**

Continuation of Mathematics 310. Additional topics such as Pell's equation, continued fractions, Diophantine approximation. Prerequisite: Mathematics 310.

412 PROJECTIVE GEOMETRY**3 sem. hrs.**

Fundamentals common to all geometries. Invariance under transformations leading to projective, affine and metric geometries. Homogeneous point and line coordinates. Prerequisite: Mathematics 313.

414 TOPICS IN GEOMETRY**3 sem. hrs.**

Topics may include combinatorial problems in geometry, convexity and Helly's Theorem, sets of constant width, isoperimetric problems and others which may vary among different instructors. Prerequisite: Consent of instructor.

417 METRIC GEOMETRY**3 sem. hrs.**

Theory and methods of linear algebra applied to geometries of Euclidean space, Minkowski space and the Lorentz plane. Prerequisites: Mathematics 315, 317; recommended Mathematics 312.

421 TOPICS IN ALGEBRA FOR TEACHERS**3 sem. hrs.**

Problems in teaching of secondary school algebra. Investigation of reports, research, and recent trends in this area. Prerequisite: Mathematics 175, 251 or 315.

422 TOPICS IN GEOMETRY FOR TEACHERS**3 sem. hrs.**

Problems in teaching secondary school geometry. Investigation of reports, research and recent trends. Objectives and content of secondary school geometry. Prerequisite: Mathematics 211 or 312.

430 MODULES IN MATHEMATICS EDUCATION**variable credit**

Modules in mathematics education including mathematics curriculum, analysis of mathematics learning, general methods of teaching mathematics, strategies for teaching mathematics, evaluation in mathematics, and diagnosis and remediation of learning difficulties in mathematics. Modules are selected in consultation with adviser. Each module carries from one to three hours of credit. Prerequisites: Approval of Doctoral Committee.

440 DIFFERENTIAL EQUATIONS III**3 sem. hrs.**

Linear and nonlinear systems. Picard Lindeloff and Peano existence theorems. Extension of solutions, oscillation and comparison theorems, asymptotic behavior. Prerequisite: Mathematics 341 or consent of instructor.

441 DIFFERENTIAL EQUATIONS IV**3 sem. hrs.**

Stability, Lyapunov function, perturbation theory. Poincare-Bendixson theory, periodic solutions. Prerequisite: Mathematics 440.

445 DIFFERENTIAL GEOMETRY**3 sem. hrs.**

Curves and surfaces in Euclidean three-space properties of a surface, tensor analysis, Riemannian geometry. Prerequisite: Consent of instructor.

447 REAL ANALYSIS I**3 sem. hrs.**

The general Lebesgue integral, functions of bounded variation and absolute continuity, introduction to general measure and integration theory. Prerequisite: Mathematics 317 and 347.

448 REAL ANALYSIS II**3 sem. hrs.**

Continuation of Mathematics 447. LP spaces; general measure and integration theory. Prerequisite: Mathematics 447.

449 COMPLEX ANALYSIS II**3 sem. hrs.**

Conformal mappings, Riemann surfaces meromorphic function, infinite products of holomorphic functions, and integration of differential forms. Prerequisite: Mathematics 349.

450 FINITE SAMPLING I**3 sem. hrs.**

Application and theory of sampling, Mathematical sampling; simple, stratified, and cluster. Evaluation of plans with respect to precision and cost. Prerequisite: Mathematics 350.

451 FINITE SAMPLING II**3 sem. hrs.**

Analysis of sampling designs from numerous fields of application. Use of basic sampling theorems in development of efficient models. Prerequisite: Mathematics 450.

452 THEORY OF STATISTICS**3 sem. hrs.**

Order statistics, limiting distributions, sufficient statistics, likelihood ratio test, distribution of certain quadratic forms in analysis of variance. Prerequisites: Mathematics 116 or 176, and 351.

453 LINEAR STATISTICAL MODELS**3 sem. hrs.**

Multivariate normal distribution, distribution of quadratic forms, the general linear hypothesis of full rank, regression models, analysis of variance models. Prerequisites: Linear algebra and Mathematics 351.

455 STOCHASTIC PROCESSES**3 sem. hrs.**

Generating and characteristic functions of discrete probability density functions. Random walk and stochastic processes. Introduction of Markov chains. Prerequisite: Mathematics 351.

458 THE DESIGN OF EXPERIMENTS**3 sem. hrs.**

Linear models and the logic of planned experimentation, choice of statistical technique, and analysis of data. Prerequisite: Mathematics 351.

**463 THEORY OF COMPUTABILITY AND
RECURSIVE FUNCTIONS****3 sem. hrs.**

Recursive and recursively enumerable functions, Turing machines, Post systems, examples of decidable and unsolvable problems. Prerequisite: Mathematics 315 or consent of instructor.

470 GENERAL TOPOLOGY I**3 sem. hrs.**

Topological spaces, uniform spaces, product and quotient spaces, separation properties and connected spaces, compact spaces. Prerequisite: Mathematics 347 or 375.

471 GENERAL TOPOLOGY II**3 sem. hrs.**

Metrizability conditions, continuity, the theory of convergence using both filters and nets, completions and compactifications. Prerequisite: Mathematics 470.

480 FOUNDATIONS OF MATHEMATICS**3 sem. hrs.**

Cardinals, ordinals, and structure of real number system; interaction of analysis algebra, number theory and topology. Prerequisite: Consent of instructor.

490 SEMINAR IN MATHEMATICS**1-4 sem. hrs.**

Topics in theoretical and applied mathematics discussed by staff and visiting lecturers; individual study and student papers. May be repeated for credit with different subject matter. Total credit earned may be up to eight semester hours. Prerequisite: Consent of instructor.

**491 INTERNSHIP IN COLLEGE TEACHING IN
MATHEMATICS****3 sem. hrs.**

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491). Prerequisite: Mathematics 312, 315, 347; or consent of instructor.

493 PROSEMINAR**1-3 sem. hrs.**

Supervised presentation by students of recently published mathematics and discussion of problems related to reading the mathematics literature. Prerequisite: Consent of Doctoral Committee.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

**581 SEMINAR IN RESEARCH AND
DEVELOPMENT IN MATHEMATICS
EDUCATION****3 sem. hrs.**

Analysis of research in strategies or methods for teaching mathematics and in the learning of mathematics. Analysis of curriculum projects as they relate to these research findings. Analysis of current research and consideration of the implications of this research for new curricular innovations, and for classroom teaching. Prerequisites: Mathematics 430 or consent of instructor.

585 SEMINAR IN ALGEBRA**1-3 sem. hrs.**

May be repeated to a total of 6 semester hours if different material is covered. Prerequisites: Mathematics 408 or consent of instructor.

587 SEMINAR IN ANALYSIS**1-3 sem. hrs.**

May be repeated to a total of 6 semester hours if different material is covered. Prerequisites: Mathematics 448 or consent of instructor.

588 SEMINAR IN TOPOLOGY**1-3 sem. hrs.**

May be repeated to a total of 6 semester

hours if different material is covered. Prerequisites: Mathematics 471 or consent of instructor.

599 DISSERTATION

variable credit

Research, library search, curriculum study, and writing related to Doctor of Arts dissertation requirement. Approval of the chairperson of the department is required. Prerequisite: consent of Doctoral Committee.

Microbiology (See Biological Sciences)

Music

Chairperson of the Department: David L. Shrader. Office: Centennial Building, East 230.

Teaching Staff: D. Armstrong, R. Bedford, C. Bolen, R. Cordero, A. Corra, L. Farlee, J. Ferrell, G. Foeller, T. Han, P. Hillstrom, A. Lewis, D. Peterson, M. Pollock, D. Poultney, J. Rehm, J. Roderick, P. Rosene, H. Rye, D. Shradler, G. Sudano, D. Williams.

The department offers work leading to the following degrees: M.A., M.M. Ed., M.M., and M.S. All students seeking an advanced degree in music must take placement examinations in the areas of theory and history and literature. Departmental requirements will be determined in part by the results of the placement tests and students should check with their departmental adviser to develop their individual programs of study.

All graduate students in music will take a minimum of nine semester hours as a core requirement. In addition, all graduate students will select an area of concentration consisting of a minimum of twelve semester hours. The following concentrations are available: Musicology, Theory and Composition, Performance, and Music Education.

All full-time graduate students are required to participate in a major performing organization.

Any student wishing to take graduate applied music must audition in his specific performance area.

Thesis options include: thesis, recital, composition, comprehensive examination.

Core Requirements

The following courses are required for all master's degrees:

357 Music Bibliography	3 hrs.
453 Studies in Music	3 hrs.
One course in music styles	
(as advised)	3 hrs.

9 hrs.

Concentrations

(All concentrations are available with the M.A. degree. The concentrations of Composition and Performance are available with the M.M. degree. With the M.M. Ed. degree, only the concentration of Music Education is available.) The following concentrations (12-hour minimum) are available to graduate students. Each student should declare a concentration before enrolling for the first semester of graduate study.

MUSICOLOGY (Available with M.A.)

358 Notation	2 hrs.
452 The Symphony	3 hrs.
454 History of Musical Instruments	2 hrs.
455 Music in America	3 hrs.
Electives in Musicology	2 hrs.

12 hrs.

THEORY AND COMPOSITION (Available with M.A. and M.M.)

305 Composition	3 hrs.
One course in music styles	
(as advised)	3 hrs.
464 Theory Pedagogy	3 hrs.
Electives in Theory	4 hrs.

13 hrs.

PERFORMANCE (Available with M.A. and M.M.)

431, 432, etc. (Applied Music)	6-10 hrs.
330 Pedagogy and Literature	2 hrs.
Electives in performance areas	0-4 hrs.

12 hrs.

MUSIC EDUCATION (Available with M.M. Ed. and M.S.)

360 Psychology of Music Education	3 hrs.
461 Seminar in Music Education	3 hrs.
497 Introduction to Research	
Methodology	3 hrs.
Electives in Music Education	3 hrs.
Applied Music	4 hrs.

16 hrs.

Courses

301 FORM AND ANALYSIS IN MUSIC

3 sem. hrs.

Structure of music from simple binary and ternary forms to rondo, theme and variations, and sonata forms.

305 COMPOSITION

3 sem. hrs.

Free composition in larger forms. May be repeated.

307 SURVEY OF MUSIC THEORY

2 sem. hrs.

Review of analytical techniques and pro-

cedures. Emphasis on tonal music.

309 ADVANCED ORCHESTRATION

3 sem. hrs.

Prerequisite: MUS 209 or consent of instructor.

330 PEDAGOGY AND LITERATURE

2 sem. hrs.

Methods of teaching, class and individual instruction; emphasis on techniques and a comparison of various teaching procedures. Survey of important literature and composers for each medium. (Brass, woodwind, percussion, voice, strings, piano, organ). May be repeated. More than one area may be taken concurrently.

331-338 APPLIED MUSIC

2 or 4 sem. hrs. each

Individual instruction: Advanced brass 331; Harpsichord, 332; Organ, 333; Percussion, 334; Piano, 335; Strings, 336; Voice, 337; Woodwinds, 338. May be repeated. Permission of appropriate coord. one semester in advance of registration.

340 INFLUENCE OF MUSIC UPON BEHAVIOR

3 sem. hrs.

A study of the various physiological effects of music. The place of functional music in music education, investigation of effective media and musical patterns. The relation of music and health in education, industry, and aesthetics. Prerequisites: MUS 190, 191, PSY 111, SOA 106.

341 MUSIC IN THERAPY

3 sem. hrs.

The application of music experience as an adjunctive therapy in the prescriptive treatment of the exceptional child. Prerequisites: Music 190, 191, and 340; or senior standing.

351 THE OPERA

3 sem. hrs.

Historical development of opera; emphasis on stylistic elements and trends of the various periods. Plots and music through recordings, piano scores, full scores, live performances. Prerequisite: Music 204 or consent of instructor.

353 HYMNOLOGY

3 sem. hrs.

Christian hymns from early Greek and Roman times. Various denominational hymnals are examined and evaluated.

354 SACRED MUSIC REPERTOIRE

2 sem. hrs.

Reading and evaluating choral literature of all periods, covering motets, anthems, plainchant, and responses for adult and children's choirs. Attention given to organ music, instrumental music, cantata and oratorio.

355 ELECTRONIC MUSIC

2 sem. hrs.

An analysis of the various techniques of composition in the electronic media with practical experiences with the variety of sound-generating equipment available to the composer. Prerequisite: Music 155.

357 MUSIC BIBLIOGRAPHY

3 sem. hrs.

Introduction to methods of research. Critical examination of dictionaries, encyclopedias, catalogs and other aids to research.

358 NOTATION

2 sem. hrs.

Black notation in Medieval music: square, pre-Franconian. Tablatures and white notation in Renaissance solo and ensemble music.

360 INTRODUCTION TO PSYCHO-MUSICOLOGY

3-4 sem. hrs.

(Formerly MUS 460: Psychology of Music Education.) Laboratory required for students following Music Therapy program. An introduction to the psychology of music behavior and cognition. Topics include music perception, memory, and learning and their relation to the sensory, formal, and expressive properties of music.

361 CURRENT TRENDS IN INSTRUMENTAL MUSIC

3 sem. hrs.

Administration and supervision of instrumental music in elementary and secondary schools, methods and materials in current use, and current research related to instrumental music teaching. Formerly MUS 261.

363 CHORAL TECHNIQUES

2 sem. hrs.

Clinical aspects of the chorus rehearsal, contemporary choral practices, repertoire and source material, interpretation and program building. Prerequisite: course in conducting or practical experience.

371 MUSIC FOR THE EXCEPTIONAL CHILD

3 sem. hrs.

Trends in music education for exceptional children. Techniques and materials for a functional program of singing, playing, listening, and creative activities.

377 MUSIC EDUCATION IN THE ELEMENTARY GRADES

3 sem. hrs.

Purposes, content, materials and teaching procedures in general music classes in elementary schools; supervisory practices, in-service workshops and curriculum planning. Prerequisite:

site: Music 262 or 277. For elementary classroom teachers, music teachers, and music supervisors.

384 OPERA PRODUCTION

3 sem. hrs.

Problems of presenting specific representative works from music theatre repertoire. Prerequisite: Approval Music Theatre Director. May be repeated.

391 MUSICAL STYLES IN THE RENAISSANCE

3 sem. hrs.

A systematic survey of musical styles in the mass, motet, madrigal, and other forms considered within the musical and cultural milieu of the time. Prerequisite: Music 204.

392 MUSICAL STYLES OF THE BAROQUE

PERIOD

3 sem. hrs.

An examination of the styles of the period, using the tools analysis and of historical inquiry to trace the inception and development of musical forms, techniques, and traditions. Prerequisite: Music 204.

394 MUSICAL STYLES IN THE CLASSICAL PERIOD

3 sem. hrs.

A detailed study of the forms and styles of the classical period, including opera, oratorio, and mass as well as symphony, concerto, sonata, and string quartet. Prerequisite: Music 204.

395 MUSICAL STYLES IN THE ROMANTIC PERIOD

3 sem. hrs.

A selective investigation of the stylistic and aesthetic bases of Romanticism as reflected in the major vocal and instrumental forms of the period. Prerequisite: Music 204.

396 MUSICAL STYLES IN THE TWENTIETH CENTURY

3 sem. hrs.

An exploration of 20th-century styles from traditionally-oriented to electronic and from totally serialized to aleatory. Prerequisite: Music 204.

402 FORM AND ANALYSIS IN MUSIC

3 sem. hrs.

Continuation of Music 301 with emphasis on harmonic structure.

431-438 APPLIED MUSIC

2-4 sem. hrs.

Individual instruction in brass, woodwinds, percussion, strings, voice, piano, organ, harpsichord, and harp. May be repeated for credit. Permission to enroll must be obtained from appropriate

coordinator in the semester prior to the semester or summer session in which the student expects to enroll.

439 ENSEMBLE

1 sem. hr.

Study and performance of chamber music in any suitable combination of instruments or voices. Permission to enroll must be obtained from appropriate coordinator in the semester prior to the semester or summer session in which student expects to enroll. Prerequisite: By try-out.

452 THE SYMPHONY

3 sem. hrs.

Survey of the symphony orchestra and symphonic literature from early eighteenth century to the present day. Study through recordings, orchestral scores and piano scores.

453 STUDIES IN MUSIC

3 sem. hrs.

Application of bibliographical skills to individualized research topics in music and music education. Students must complete Music 357 before enrolling in Music 453. Prerequisite: Music 357 or consent of instructor.

454 HISTORY OF MUSICAL INSTRUMENTS

2 sem. hrs.

Evolution of musical instruments from the origins to the present, with particular regard to music in general culture. The development of primitive, Oriental and western instruments.

455 MUSIC IN AMERICA

3 sem. hrs.

Indigenous and borrowed influences in American music from the time of the early settlements through periods of expansion to present day activities. A background of American musical style and culture and an understanding of present trends are developed.

456 STUDIES IN SACRED MUSIC

3 sem. hrs.

Guided discussion and observation or practice in the field of sacred music with an emphasis on current trends. Attention is given to projects in research.

461 SEMINAR IN MUSIC EDUCATION

3 sem. hrs.

Study of aesthetic theory and educational theory in relation to current and persistent issues in music education.

464 PEDAGOGY OF THEORY

3 sem. hrs.

Analysis of current practices in the teaching

of theory; techniques of teaching theory during the regular rehearsal of performing groups and an analysis of source material. The development of a practical course in theory as it relates to the student's own teaching situation. Prerequisite: Teaching experience or advanced standing in theory.

468 CONDUCTING

2 sem. hrs.

Critical examination of scores with reference to tempo, phrasing, nuance, balance, timbre, and baton techniques involved. For experienced teachers.

481-488 PERFORMING ORGANIZATIONS

1 sem. hr.

Participation at the graduate level in the major organizations: Concert or Varsity Band, 481; Symphony Orchestra, 482; Concert Choir, 484; Men's Glee Club, 485; Treble Choir, 486; Community-University Oratorio Chorus, 488.

491 INTERNSHIP IN COLLEGE TEACHING IN MUSIC

3 sem. hrs.

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH METHODOLOGY

3 sem. hrs.

Introduction to bibliography, methods of scholarly research and critical evaluation of research.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Physical Education

(See Health, Physical Education, Recreation, and Dance).

Political Science

Chairperson of the Department: Hibbert R. Roberts. Office: Schoeder Hall 306.

Teaching Staff: H. Chung, T. Eimermann, G. Gordon, J. Gueguen, J. Honan, R. Hunt, G. Kiser, W. Kohn, W. Mead, A. Monroe, F. Roberts, H. Roberts, J. Verner, T. Wilson, H. Zeidenstein.

Master's Degree in Political Science

The department offers work leading to the following degrees: M.A., M.S. Students may take either a comprehensive program, which requires courses in five sub-fields, or a thesis program which requires courses in at least three sub-fields, or a public service option which requires courses in at least two sub-fields and a thesis.

Courses

306 REGIONAL AND AREA STUDIES

1-9 sem. hrs.

Intensive study of particular lands, environments, cultures, and peoples. Prerequisite: Consent of instructor. Usually given cooperatively with other departments.

310 VOTING AND ELECTIONS

3 sem. hrs.

Intensive investigation of U.S. voting behavior and electoral process; includes instruction in analysis techniques.

312 PUBLIC OPINION

3 sem. hrs.

Includes attention to social and psychological bases of public opinion, current trends, methods of measurement, and opinion-policy linkages. Prerequisite: POS 105 or SOA 106.

313 COLLECTIVE DECISION-MAKING

3 sem. hrs.

Game theory approach to decision-making in large groups, including legislatures, unions, oligopolies, bureaucratic organizations, and international negotiations.

315 CONSTITUTIONAL LAW: FUNCTIONS AND POWERS

3 sem. hrs.

Major Supreme Court decisions on federalism, separation of powers, taxation, commerce, voting, and citizenship.

316 CONSTITUTIONAL LAW: CIVIL LIBERTIES

3 sem. hrs.

Major Supreme Court decisions involving rights of the accused, discrimination, free expression, and freedom of religion.

317 POVERTY LAW

3 sem. hrs.

An examination of political and legal responses to the problems of the poor. Major legal innovations in landlord-tenant, consumer, and welfare rights are studied.

318 ADMINISTRATIVE LAW

3 sem. hrs.

An overview of administrative law topics such as legislative, executive, and judicial control of administrative actions, public and private access to information, the administrative hearing process and other due process concerns.

321 COMMUNITY POWER AND POLITICS

3 sem. hrs.

Introduction to community research techniques. Substantive analysis of community power studies. Emphasis on local government structure and politics and the structure and politics of community social services.

329 INTERGOVERNMENTAL RELATIONS**3 sem. hrs.**

Federalism in theory and practice, focusing on U.S.; politics and policy in intergovernmental contexts: recent initiatives and current problems.

330 PROBLEMS OF PUBLIC ADMINISTRATION**3 sem. hrs.**

Varied approaches to problems relevant to public policy, organization development, management, staff, or personnel concerns, or applied behavioral techniques. May be repeated if content is different.

331 PUBLIC PERSONNEL ADMINISTRATION**3 sem. hrs.**

The personnel process in American bureaucracy: matching the individual and the job; employer-employee relations; employee motivation; problems and prospects.

344 POLITICAL DEVELOPMENT AND NATION BUILDING**3 sem. hrs.**

Analysis of newly industrializing societies, featuring discussion of major social and psychological theories of political change and development.

345 ASIAN POLITICS**3 sem. hrs.**

Comparative studies in the government and politics of selected Asian nations. May be repeated.

346 CENTRAL AMERICAN POLITICS**3 sem. hrs.**

Politics of Central American integration and politics of the six countries of the Isthmus.

347 SOUTH AMERICAN POLITICS**3 sem. hrs.**

Politics of development and regional integration in South America, using selected countries as examples.

348 VIOLENCE AND MODERNIZATION**3 sem. hrs.**

Theoretical analysis of major political "break-downs" (turmoil to civil war) in contemporary societies, particularly those in the developing world.

351 INTERNATIONAL LAW**3 sem. hrs.**

Political nature, legal principles, and juridical procedures and cases of contemporary international law.

354 SOVIET FOREIGN POLICY**3 sem. hrs.**

A study of the strengths and weaknesses of Soviet foreign policy. Focuses on the foreign pol-

icy decision-making system, on intentions and capabilities.

356 AMERICAN FOREIGN POLICY**3 sem. hrs.**

An analysis of the formulation, implementation, and content of American foreign policy.

362 CLASSICAL POLITICAL PHILOSOPHY**3 sem. hrs.**

Introduction to the origin and development of inquiry about man's life in political association.

363 AMERICAN POLITICAL THEORY**3 sem. hrs.**

Political ideas of recent and contemporary American thinkers. Previous exposure to political theory assumed.

364 CONTEMPORARY POLITICAL THOUGHT**3 sem. hrs.**

Survey of the major political theories between the end of the 19th century (since Marx) and the present.

381 INTRODUCTION TO PARALEGALISM**3 sem. hrs.**

An analysis of the role of paralegals in the judicial process, and a study of the paralegal skills necessary to qualify for participation in POS 391. Consent of instructor.

390 PUBLIC SERVICE INTERNSHIP**1-6 sem. hrs.**

Planned, supervised experience in a governmental or community organization, providing on-the-job training and introduction to public service careers. Consent of instructor.

Seminars

The content of the following seminars will vary according to the interests of the particular instructor offering the course. Provided different material is covered, a seminar may be repeated.

411 SEMINAR IN AMERICAN POLITICS**3 sem. hrs.****421 SEMINAR IN STATE AND LOCAL POLITICS****3 sem. hrs.****422 SEMINAR IN URBAN POLITICS****3 sem. hrs.****431 SEMINAR IN PUBLIC ADMINISTRATION****3 sem. hrs.****432 SEMINAR IN JUDICIAL POLITICS****3 sem. hrs.****441 SEMINAR IN COMPARATIVE POLITICS****3 sem. hrs.**

451 SEMINAR IN INTERNATIONAL RELATIONS

3 sem. hrs.

452 SEMINAR IN INTERNATIONAL ORGANIZATIONS AND LAW

3 sem. hrs.

461 SEMINAR IN POLITICAL THOUGHT

3 sem. hrs.

490 READINGS IN POLITICAL SCIENCE

1-3 sem. hrs.

For the student who would benefit from more specialized or independent study adapted to his background and needs. To be taken only with permission of the student's adviser.

491 INTERNSHIP IN COLLEGE TEACHING IN POLITICAL SCIENCE

3 sem. hrs.

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

497 INTRODUCTION TO RESEARCH METHODOLOGY

3 sem. hrs.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Psychology

Chairperson of the Department: Macon Williams. Office: 435 E, DeGarmo Hall.

Teaching Staff: T. Beehr, L. Berk, R. E. Brown, D. Carrington, V. Cashen, D. Chalmers, P. Chesebro, R. Crist, E. Fitzpatrick, W. Friedhoff, N. Gamsky, N. Gill, W. Gnagey, B. Goebel, M. Goldstein, A. Grupe, R. Hogan, J. Hoover, A. House, S. Hutter, I. Jacks, J. Johnson, D. Lamb, K. Leicht, E. Lemke, M. Lewis, L. Manelis, G. McCoy, B. Moore, G. Ramseyer, G. Redding, R. Rumery, L. Schmaltz, D. Schmidt, A. Sodetz, W. Vernon, M. Vinitsky, J. Williams, M. Williams.

The Department of Psychology offers the MA and MS in Psychology as well as the MA and MS in School Psychology. In each case, it is possible for the student to select one of a number of areas of specialization the department offers: Experimental, Organizational-Industrial, Educational, Measurement-Statistics, Counseling, Clinical and School Psychology. Departmental requirements and descriptions of these areas are given below.

All graduate students are required to take Psychology 418, 420 and 440 or 442. Although required courses may be waived, students must still earn a minimum total of 32 hours.

Areas of emphasis or specialization offered by the department are briefly described below.

Each area has additional and specific course requirements. For more specific information interested students are requested to send their inquiries to the chairperson of the department.

Experimental

This area of emphasis is designed for students who wish to pursue disciplinary study with the plan of applying for doctoral study, teaching at the community college level, etc.

Organizational-Industrial

Students selecting this area of emphasis can gain preparation for positions in personnel, training, management, labor relations, or to enhance their effectiveness in their present position.

Educational

This area is designed for teachers who already possess reasonable knowledge of their major teaching field but who wish to know more about the teaching-learning process and human behavior such that it will improve their effectiveness in teaching-learning situations.

Measurement-Statistics

Students selecting this area of emphasis can gain knowledge which will facilitate careers in computer programming, educational evaluation, advanced graduate study, psychometrics, teaching.

Counseling

This area requires two years of study and is designed to prepare students for counseling positions in settings such as community colleges, mental health centers, family service agencies, rehabilitation centers, etc.

Clinical

This area of emphasis requires two years of study and is designed to prepare students for positions in settings such as mental health centers, family service agencies, other mental health facilities, and college and community settings. A limited number of students may plan a program to emphasize child and family treatment.

School

This program requires from one to two years of study depending on the student's undergraduate background in psychology. It is designed to prepare students to function as school psychologists in the public schools. Successful completion of the program allows students to meet all but the internship requirement for certification as school psychologists by the State of Illinois.

The department operates a Center for the Assessment and Treatment of Children and Families. Some graduate students enrolled in the practica spend part of their time working in this Center.

Courses**301 DEVELOPMENTAL PSYCHOLOGY I****3 sem. hrs.**

Motor, cognitive, and emotional development and personality growth of children, birth through pre-adolescence. Prerequisite: Psychology 111.

302 DEVELOPMENTAL PSYCHOLOGY II**3 sem. hrs.**

Motor, cognitive, and emotional development and personality growth of the adolescent. Prerequisite: Psychology 111.

305 PSYCHOLOGY OF WOMEN**3 sem. hrs.**

An examination of psychological research to place in scientific perspective the etiology and behavioral consequences of female and male-oriented attitudes. Prerequisite: Psychology 111.

320 HISTORY AND SYSTEMS OF PSYCHOLOGY**3 sem. hrs.**

Historical antecedents of modern psychology, beginning with Aristotle. Examination of modern psychology from a systematic point of view. Prerequisite: 12 semester hours of Psychology.

330 EXPERIMENTAL PSYCHOLOGY I**3 sem. hrs.**

Philosophy of science and inquiry, with emphasis on experimental methodology and some application of principles through laboratory experimentation and demonstrations. Prerequisite: Psychology 111. Concurrent registration in Psychology 340 is recommended.

331 STUDIES IN EXPERIMENTAL PSYCHOLOGY**3 sem. hrs.**

Individualized research course focusing on particular content areas. Sections concentrate in different areas. Repeatable but not in the same content area. Prerequisites: Psychology 330, 340 or consent of instructor.

333 PRINCIPLES OF BEHAVIOR MODIFICATION (formerly EXPERIMENTAL ANALYSIS OF BEHAVIOR)**3 sem. hrs.**

Principles of behavior modification with an emphasis upon their use in a variety of educational and clinical settings. Prerequisite: Psychology 111.

334 PSYCHOLOGICAL MEASUREMENT**3 sem. hrs.**

Selection, evaluation and interpretation of psychological tests, with emphasis on basic theory. Tests are considered as indicators of

constructs and/or in specific decision situations. Prerequisite: Psychology 111.

335 INTRODUCTION TO MATHEMATICAL PSYCHOLOGY**3 sem. hrs.**

Role of mathematics in psychological theory. Application of mathematical models in measurement, learning, perception and choice. Prerequisites: Psychology 111 and Mathematics 110 or 120.

340 STATISTICS I**3 sem. hrs.**

Application and interpretation of basic statistics used in the behavioral sciences: Descriptive statistics, simple hypothesis testing and two-variable regression. Prerequisite: Psychology 111 or Sociology-Anthropology 106. Also offered as C&I 340 and SOA 340.

346 PSYCHOLOGY OF EXCEPTIONAL CHILDREN**2 sem. hrs.**

Intellectual, emotional, physical, or social deviations in individuals which create a need for modifications in their education, training, as well as treatment. Prerequisite: Psychology 301 or 302 or Curriculum and Instruction 210 or consent of instructor.

347 BEHAVIOR DISORDERS IN CHILDREN**3 sem. hrs.**

Medical, psychological, sociological aspects of behavioral disorders of children. Prerequisite: Psychology 111.

348 MENTAL RETARDATION**3 sem. hrs.**

Medical, psychological and sociological characteristics and behavior of the mentally retarded. Methods of classification, causes and rehabilitative aspects. Prerequisite: Psychology 215 or Curriculum and Instruction 210.

350 PSYCHOPATHOLOGY**3 sem. hrs.**

Behavior disorders; neuroses, psychoses, character disorders, mental deficiencies, and other psychopathological conditions. Prerequisite: 12 semester hours of Psychology.

352 HUMAN ABILITIES**3 sem. hrs.**

Nature, assessment and organization of human abilities. Empirical and theoretical analysis of genetic and environmental factors in development of abilities. Prerequisite: Psychology 334.

360 LEARNING**3 sem. hrs.**

Experimental data bearing on the problem

of human learning; learning theory; learning data and theory in relation to applied problems. Prerequisite: Psychology 111.

361 PERCEPTION

3 sem. hrs.

Cognitive processes and their relationship to other processes. Relationship of sensation, attention, and memory to perception and factors influencing perception. Prerequisite: Nine semester hours of Psychology.

363 PHYSIOLOGICAL PSYCHOLOGY

3 sem. hrs.

Neurophysiological and biochemical substrates of behavioral processes including sensorimotor, perceptual, motivational, emotional, and intellective behaviors. Prerequisites: Nine semester hours of Psychology and Biology 100.

364 MOTIVATION

3 sem. hrs.

Evolution of basic concepts leading to contemporary explanation of determiners of action with application to vocational, social and educational areas. Prerequisite: Nine semester hours of Psychology.

365 DYNAMICS OF SOCIAL BEHAVIOR

3 sem. hrs.

An overview of the explanations for various aspects of social behavior, e.g., interaction, attitudes, person perception, etc. Prerequisite: Psychology 131.

416 ADVANCED EDUCATIONAL PSYCHOLOGY

3 sem. hrs.

Learning retention and forgetting, transfer of training, individual differences, intelligence, language, social class influences and mental health as they pertain to education. Prerequisite: Psychology 215 or Curriculum and Instruction 210.

418 THEORIES OF LEARNING

3 sem. hrs.

A consideration of the major contemporary learning theories and their relationship to experimental data. Prerequisite: Psychology 330 or 360.

420 THEORIES OF PERSONALITY

3 sem. hrs.

Analysis of major theoretical formulations concerning personality with emphasis upon their current status and evidential bases.

421 ADVANCED BEHAVIOR MODIFICATION

3 sem. hrs.

Techniques for changing behavior through manipulation of environment. General principles of conditioning plus their application to patterns of problem behavior. Prerequisite: Psychology 331 (operant), 333, 360, or consent of instructor.

422 PRACTICUM: BEHAVIOR MODIFICATION

3 sem. hrs.

Conditioning techniques under controlled conditions with students personally disturbed by minor behavior problems. Methods for assessing the effectiveness of the techniques. Prerequisites: Psychology 421 and consent of instructor.

432 PSYCHODIAGNOSTICS I

3 sem. hrs.

Theory of and training in individual mental testing with emphasis on the Binet and the Wechsler tests. Prerequisites: Psychology 350 or concurrent registration and consent of instructor.

433 PSYCHODIAGNOSTICS II

3 sem. hrs.

Theory of projective methods and development of competence in the use of selected procedures. Prerequisites: Psychology 432 and consent of instructor.

434 PSYCHODIAGNOSTICS III

3 sem. hrs.

Multi-dimensional approaches to personality assessment, with emphasis on the Rorschach test. Prerequisites: Psychology 433 and consent of instructor.

435 DIAGNOSTIC PROCEDURES

3 sem. hrs.

Emphasis is on the assessment, diagnosis and remediation of learning disabilities with particular stress on a psycholinguistic approach. Prerequisites: Graduate standing in Psychology and consent of instructor.

436 PRACTICUM

1-8 sem. hrs.

Clinical practice in university facilities and outside agencies. Provides training and diagnosis and treatment. Fifteen hours per week. Prerequisites: Clinical & Counseling: Psychology 432 and 464 and consent of instructor: School: Psychology 432, 433 and 435 and consent of instructor. May be repeated to a total of eight semester hours.

437 GROUP PSYCHOTHERAPY AND COUNSELING

3 sem. hrs.

Theory and research in group dynamics, techniques of group therapy and counseling. Methods of evaluating groups, direct experience as group member and group leader. Prerequisites: Psychology 464 and consent of instructor.

438 TECHNIQUES OF OBJECTIVE PSYCHOLOGICAL ASSESSMENTS

3 sem. hrs.

Clinical application of representative tech-

niques of objective measurement. Selection, integration, and interpretation of tests will be included. Prerequisites: Psychology 334 and consent of instructor.

440 STATISTICS II

3 sem. hrs.

Logic of statistical inference: Interval estimation, complex hypothesis testing, and non-parametric techniques. Applications in behavioral sciences. Prerequisite: Psychology 340.

441 EXPERIMENTAL DESIGN

3 sem. hrs.

Statistical principles of experimental design; selection, analysis, and interpretation of Analysis of Variance and Covariance designs in the behavioral sciences. Prerequisite: Psychology 440.

442 TEST THEORY

3 sem. hrs.

Theory and principles of test reliability and validity, topics in test theory, statistical procedures applicable to psychometric methods. Prerequisites: Psychology 334 and 340.

444 MULTIVARIATE ANALYSIS

3 sem. hrs.

Topics covered include basic matrix algebra and linear transformations, analysis of covariance with multiple covariates, multivariate significance tests of group differences, discriminant analysis, multivariate analysis of variance. Prerequisite: Psychology 441.

464 THEORIES AND TECHNIQUES OF COUNSELING

3 sem. hrs.

Goals, methods and procedures of different theoretical positions. Emphasis is on inter-personal dimensions of the counseling interview.

465 VOCATIONAL COUNSELING

3 sem. hrs.

Acquiring and using occupational and educational information. Consideration of job requirements and training opportunities; developing occupational units; nature of vocational development.

470 CLINICAL PSYCHOLOGY

3 sem. hrs.

Traces history and philosophy of profession from assessment, psychotherapeutic and research traditions. Prerequisite: Graduate standing in Clinical, Counseling or School Psychology or consent of instructor.

480 SEMINAR IN PSYCHOLOGY

2-3 sem. hrs.

Permission of the instructor.

481 COMMUNITY MENTAL HEALTH

3 sem. hrs.

Social systems as they affect individual mental health. Conceptual models, typical programs, methods of analyzing communities, and methods for designing community mental health programs. Prerequisite: Psychology 350.

491 INTERNSHIP IN COLLEGE TEACHING OF PSYCHOLOGY

3 sem. hrs.

Credit for this course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Sociology-Anthropology

Chairperson of the Department: Dorothy Lee.
Office: Schroeder Hall 206.

Teaching Staff: P. Baker, A. K. Clifton, F. J. Davis, R. Dirks, D. Eaton, M. Ferrell, C. T. Griffen, S. Grupp, B. Heyl, L. Huang, E. Jelks, B. Keeley, D. Lee, W. Leonard, M. Moran, O. Pocs, V. Pohlmann, M. Pratt, J. Reyman, R. Schmitt, R. Stivers, S. Thomas, W. Tolone, R. Walsh.

Master's Degree in Sociology

The department offers work leading to the M.A. and M.S. degrees in Sociology. The 32 hour minimum of graduate work must include Sociology 466, Sociology 471, Sociology 499 (5 hours, Master's Thesis), and at least six additional hours of Sociology courses at the 400 level, excluding Independent Study. The remaining 15 hours may be taken at the 300 or 400 level and may include up to six hours in related non-sociology courses and up to six hours of Independent Study with consent of adviser. Entering students should have a minimum of 12 semester hours in Sociology including Sociology 340, Sociology 370, and Sociology 371 or demonstrate equivalent competency. Enrollment for such undergraduate courses may be used to remove deficiencies but do not count toward the 32 hour minimum for the graduate degree.

Courses in Sociology

332 SMALL GROUPS

3 sem. hrs.

Conditions affecting interaction in small groups, the small group as an ongoing social system. Limited research project. Prerequisite: Sociology 131 or Psychology 131.

333 SOCIALIZATION OF THE INDIVIDUAL

3 sem. hrs.

A social psychological approach. Childhood

and adulthood socialization are examined from the perspectives of symbolic interactionism, role theory, reference group theory, and self theory. Pragmatic implications are considered. Prerequisite: Sociology 106 or Psychology 111.

341 SOCIOLOGY OF SEX ROLES

3 sem. hrs.

Application of culture concepts, status, role and self concepts, and socialization concepts toward the explanation of sex differences in social behavior. Institutionalized and social change processes are examined. Prerequisite: Sociology 106 or Psychology 111.

342 HUMAN SEXUALITY

3 sem. hrs.

The sociological, psychological, and physiological aspects of human sexuality. Societal norms and values; female-male attitudes; actual behavior; variance and disorders; myths and fallacies. Prerequisite: Sociology 106 or Psychology 111.

350 SOCIOLOGY OF EDUCATION

3 sem. hrs.

Sociological perspective on educational systems. Relationship of the educational system to other institutions, organizational characteristics and social factors influencing behavior of students. Prerequisite: Sociology 106.

365 JUVENILE DELINQUENCY

3 sem. hrs.

Delinquency as a social and legal problem; theories of delinquency, the juvenile court; prevention and treatment. Prerequisite: Sociology 263.

366 CONTEMPORARY SOCIAL MOVEMENTS

3 sem. hrs.

Patterns of collective behavior; structure and functions of social movements. Examination of several social movements, analysis of morals, leadership and control. Prerequisite: Sociology 106.

367 CRIMINOLOGY

3 sem. hrs.

Criminological theory and practice. Crime as a social and legal problem. The administration of justice. Prerequisite: Sociology 263.

369 SOCIAL CHANGE

3 sem. hrs.

An investigation of social change theory; case studies of change in developing societies undergoing "modernization"; the dynamics and consequences of planned social change. Prerequisite: Sociology 106 or consent of instructor.

410 SOCIOLOGY OF URBAN AREAS

3 sem. hrs.

Analysis of current theory and research in urban sociology; application to current issues in urban areas.

431 ADVANCED SOCIAL PSYCHOLOGY

3 sem. hrs.

Intensive study of a major sub-area of social psychology. Socialization, social role theory, self theory, collective behavior, attitude formation and measurement.

461 READINGS IN SOCIOLOGY

1-3 sem. hrs.

A course for the graduate student who would benefit more from a specialized independent type of study adapted to the student's background and needs. To be taken by permission of the department chairperson and the instructor involved.

465 SOCIOLOGY OF FORMAL ORGANIZATIONS

3 sem. hrs.

Analysis of the theory of social groups with special emphasis on formal, complex, and bureaucratic organizations; emergence of informal patterns.

466 SOCIOLOGICAL THEORY

3 sem. hrs.

An analysis of recent theoretical developments in sociology. Attention will focus on a variety of social theories found useful in explaining social phenomena.

467 SOCIOLOGY OF LAW

3 sem. hrs.

Sociological theories of law, and research on law in society. Attention to judicial and jury decision-making, legal structures, legislation, power, beliefs, conflict, and social change. Public, civil and criminal law included.

469 SEMINAR IN SOCIOLOGY

3 sem. hrs.

Advanced study for graduate students interested in developing theoretical models or in special research topics in sociology. Provided different material is covered, the course may be taken for credit more than once.

471 SOCIOLOGICAL RESEARCH

3 sem. hrs.

Design and execution of research involving theoretical and methodological aspects of sociological problems. Advanced methods of analysis and interpretation of data. (Formerly 497).

491 INTERNSHIP IN COLLEGE TEACHING OF SOCIOLOGY-ANTHROPOLOGY

3 sem. hrs.

Credit for the course is given in Curriculum and Instruction (see Curriculum and Instruction 491).

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Auxiliary Courses

(May not be counted for graduate credit in Sociology.)

340 STATISTICS I**3 sem. hrs.**

Application and interpretation of basic statistics used in the behavioral sciences; descriptive statistics, simple hypothesis testing and two-variable regression. Prerequisite: Sociology 106 or Psychology 111. Also offered as C&I 340 and Psychology 340.

370 HISTORY OF SOCIOLOGICAL THOUGHT**3 sem. hrs.**

Analysis and appraisal of classical works in sociology from mid-nineteenth century to the present. Prerequisite: Sociology 106.

371 INTRODUCTION TO SOCIOLOGICAL RESEARCH**3 sem. hrs.**

Convergence of theory and research; design of inquiry, measurement, survey design, data collection, analysis and interpretation. Research projects are part of the course. Prerequisite: Sociology 106.

Courses in Anthropology**306 REGIONAL AND AREA STUDIES****1-9 sem. hrs.**

Directed research in any of the sub-disciplines in anthropology. Prerequisite: Consent of instructor. Usually given cooperatively with other departments.

380 KEY CONCEPTS IN ANTHROPOLOGY**3 sem. hrs.**

Anthropological thought from historical, systematic and applied viewpoint; emphasis on changing content, concepts, methods of the discipline. Prerequisites: SOA 180, 182, 183, 285, 286 or consent of instructor. Formerly History of Anthropological Thought.

381 ECONOMIC ANTHROPOLOGY**3 sem. hrs.**

Theories of human economical choice in non-western, non-industrial societies are considered in relationship to ethnographic materials from such societies. Prerequisite: SOA 180.

383 STUDIES IN SELECTED CULTURES**3 sem. hrs.**

Culture patterns of selected areas. Physical characteristics, history, social, political, intellectual life, cultural change of aboriginal people. Prerequisite: SOA 180. Formerly Selected Studies in Culture Areas.

384 AFRO-AMERICAN ADAPTATIONS**3 sem. hrs.**

A comparative study of Afro-American populations in a variety of ecological niches throughout the New World. The styles, strategies, and traditions of Afro-America, both historical and contemporary are analyzed in relation to tribal, peasant, and proletariat communities. Prerequisite: SOA 180.

385 POLITICAL ANTHROPOLOGY**3 sem. hrs.**

Comparative data drawn from non-human primate behavior, tribal societies, and non-Western states. Prerequisite: SOA 180.

386 CULTURES OF SOUTHEAST ASIA**3 sem. hrs.**

Patterns of prehistory, history, economics, religion, and daily life in Southeast Asia. Prerequisite: SOA 180. Formerly SOA 284.

388 HISTORICAL ARCHAEOLOGY**3 sem. hrs.**

Research methods of historical archeology reviewed, and the principles that underlie the methods examined critically. A local historic site is thoroughly studied as a class project. Prerequisite: SOA 183 or consent of instructor.

Courses in Social Work**323 CHILD WELFARE SERVICES****3 sem. hrs.**

It is recommended that this course be taken before SOA 368 if the student wishes placement in a child-serving agency. Services for dependent, neglected, and handicapped children. Prerequisite: Sociology-Anthropology 221, 222 or Special Education major. Formerly Social Work III — Child Welfare Services.

325 SOCIAL WORK METHODS I**3 sem. hrs.**

Basic theory, values, and beginning skills development generic to social work practice at individual, group and community levels. Prerequisite: Sociology-Anthropology 221 cons soc wk adv. Formerly Social Work IV — Problems in Social Casework.

335 SOCIAL WORK METHODS II**3 sem. hrs.**

Course is a continuation of methodology and skills in social work practice, and focuses specifically on knowledge, principles, techniques and approaches to effect change in small groups, organizations, communities, and larger collectives. Prerequisite: SOA 325

368 SOCIAL WORK FIELD INSTRUCTION I AND SEMINAR

3-10 sem. hrs.

Supervised field instruction and practice in social work methods with individual, groups, and communities in a social welfare agency. Pre-requisite: Sociology-Anthropology 221, 325. Conc reg in SOA 323 permitted with cons soc wk adv. Formerly Social Work intervention Methods. Majors register for 6 semester hours.

378 SOCIAL WORK FIELD INSTRUCTION II

8 sem. hrs.

Advanced supervised field instruction in social work methods with individuals, groups, and communities in a social welfare agency. Settings and experiences are different from those of SOA 368. Course includes a weekly, campus-based, faculty-led seminar in which theoretical material is integrated with the students' field practice experiences. Prerequisites: SOA 325, 335, 368.

391 SENIOR SEMINAR IN SOCIAL WORK

3 sem. hrs.

A seminar on specific selected topics not covered critically elsewhere in the major. Through assigned readings, discussions and the presentation of a substantial researched study, students analyze a social welfare issue or an area of social work practice. Prerequisite: SOA 378 or conc reg.

Spanish

(See Foreign Languages)

Special Education

Acting Chairperson of the Department: Dean S. Hage. Office: Fairchild Hall 109.

Teaching Staff: E. Bauer, K. Beckman, R. Blackley, J. Bommarito, M. Bowen, T. Caldwell, R. Cannell, H. Hadden, D. Hage, R. Hemenway, J. Lee, L. Morreau, A. J. Nezol, S. Price, E. Rex, K. Stearns, J. Stephens, V. Tasker.

Programs Offered

Graduate work for the master's degree is offered in the following areas of specialization: Deaf and Hard of Hearing, Learning and/or Behavioral Disordered, Mentally Retarded, Visually Handicapped, and Physically Handicapped. University requirements for master's degrees are given elsewhere in this catalog. Departmental requirements for the master's degree are as follows:

1. At least 12 semester hours in Education

and/or Psychology are required, including Curriculum and Instruction 497, Special Education 440, and Psychology 301.

2. At least 12 hours in courses numbered at the 400 level.

3. Additional coursework selected to meet Illinois certification requirements in at least one of the above areas of specialization, if not already certified.

4. Additional courses are selected following recommendations of the adviser with the approval of the chairperson, Department of Special Education.

A program in educational administration and special education is offered in cooperation with the Department of Educational Administration.

A program in information science and special education is offered in cooperation with the Department of Information Science. Consult the chairperson of either department for details of these two programs.

Courses

301 LABORATORY READING METHODS

3 sem. hrs.

Techniques of diagnosis and instruction for special cases of severe reading disability. Prerequisite: C&I 220. Three double periods per week.

307 EMPLOYMENT ANALYSIS FOR THE EXCEPTIONAL

3 sem. hrs.

Also offered as IT 307.

330 THE LANGUAGE OF SIGNS AND FINGERSPELLING

2 sem. hrs.

Beginning course in expressive and receptive sign language skills. Laboratory required.

345 SPECIAL CLASSES FOR THE TRAINABLE

3 sem. hrs.

Organization of educational programs for trainable mentally retarded. Observation and participation.

346 EDUCATION FOR THE MENTALLY RETARDED

4 sem. hrs.

Objectives, curriculum and methods for educable mentally retarded. Observation and participation.

347 EDUCATION OF THE NEUROLOGICALLY IMPAIRED

2 sem. hrs.

Educational adjustments for children with

severe learning problems and/or perceptual dysfunction. Observation and participation. Not for credit if had SED 362.

348 EDUCATION OF GIFTED CHILDREN
2 sem. hrs.

349 EDUCATION OF PHYSICALLY HANDICAPPED
2 sem. hrs.

Educational programs for crippled and other health impaired children. Prerequisite: BSC 381 or consent of department chairperson. Observation and participation.

350 INTRODUCTION TO VISUAL HANDICAPS
3 sem. hrs.

Nature and needs of the visually handicapped, infants to adults.

351 EDUCATION OF THE VISUALLY HANDICAPPED
3 sem. hrs.
Prerequisite: SED 350.

352 BRAILLE READING AND WRITING I
3 sem. hrs.

353 EDUCATION OF THE DEAF
2 sem. hrs.

Psychological, social, and learning problems related to education of the deaf and hard of hearing.

354 THE TEACHING OF SPEECH TO THE DEAF
4 sem. hrs.

Methods of developing speech in the preschool and school-age deaf child. Prerequisite: SED 353. Observation and participation.

355 THE TEACHING OF LANGUAGE TO THE DEAF
4 sem. hrs.

Principles and techniques of teaching language to preschool and school-age deaf children. Prerequisite: SED 353. Observation and participation.

356 BRAILLE READING AND WRITING II
3 sem. hrs.

Designed to develop mastery of the braille mathematic code and materias format code. Prerequisite: SED 352.

358 EDUCATION OF SOCIALLY AND EMOTIONALLY DISTURBED
2 sem. hrs.

Prerequisite: PSY 347. Not for credit if had SED 362.

359 THE TEACHING OF READING AND ELEMENTARY SCHOOL SUBJECTS TO THE DEAF
4 sem. hrs.

Teaching reading to deaf at all elementary school levels. Methods of teaching subjects as arithmetic, social studies and science. Prerequisite: SED 353.

360 ORIENTATION AND MOBILITY FOR CLASSROOM TEACHERS
2 sem. hrs.

Practicum in basic daily living skills and rudimentary mobility techniques.

361 EDUCATIONAL ASSESSMENT OF THE LEARNING AND BEHAVIORALLY DISORDERED
5 sem. hrs.

Generation, analysis, synthesis and application of data in planning educational programs for the learning/behaviorally disordered. Maj only or consent of department chairperson. Participation.

362 EDUCATION OF THE LEARNING AND BEHAVIORALLY DISORDERED
5 sem. hrs.

Development and delivery of educational programs for individuals identified as learning or behaviorally disordered. Prerequisite: SED 361 or conc reg req. Maj only or consent of department chairperson. Participation. Not for credit if had SED 347 or 358.

399 STUDENT TEACHING
1-10 sem. hrs.

401 ANALYSIS AND CORRECTION OF READING DISABILITY
3 sem. hrs.

Differentiated reading programs based on test findings. Opportunities provided for administering informal and standardized instruments to determine types of reading disability. Prerequisites: Curriculum and Instruction 220 and Special Education 301.

410 EDUCATIONAL ASSESSMENT AND PLANNING FOR EXCEPTIONAL CHILDREN AND YOUTH
3 sem. hrs.

Advanced study to gain and develop skills in assessing educationally relevant behaviors of exceptional pupils and developing specific educational plans based on assessed strengths and weaknesses.

420 SEMINAR IN DIAGNOSIS AND CORRECTION OF READING DISABILITIES
3 sem. hrs.

Causes and remediation of reading disabili-

ties. Research findings utilized for suggested diagnosis and correction of various types of reading problems. Prerequisite: Special Education 301 or 401.

430 WORKSHOP IN EDUCATION

2-6 sem. hrs.

(See Curriculum and Instruction 430.)

431 INDIVIDUALIZED FIELD WORK IN EDUCATION

2-3 sem. hrs.

(See Curriculum and Instruction 431.)

440 PROBLEMS IN SPECIAL EDUCATION

2 sem. hrs.

Advanced study to explore topical problems in special education. Various areas of exceptionality studied. Emphasis on examination of professional research relating to education of the exceptional.

445 CURRICULUM DEVELOPMENT FOR THE MENTALLY RETARDED

3 sem. hrs.

Designed to aid students in the development of curriculum and methods suited to the particular problems of the mentally retarded.

446 SEMINAR IN SPECIAL EDUCATION AND REHABILITATION

2 sem. hrs.

Exploration of various problems in the areas of special education and rehabilitation. Opportunities to develop program models or research designs for handicapped.

447 COORDINATING EDUCATIONAL PROGRAMS FOR EXCEPTIONAL CHILDREN

2 sem. hrs.

Principles and problems involved in administration of educational programs for exceptional children.

448 INSTRUCTIONAL PROCEDURES FOR EMOTIONALLY DISTURBED PUPILS

3 sem. hrs.

Organizing and administering laboratory procedures for maladjusted and educationally retarded pupils. Research pertaining to personality factors as related to school success. Prerequisites or concurrent registration: Curriculum and Instruction 220 and Special Education 301.

498 PROFESSIONAL PRACTICE

3-8 sem. hrs.

Refer to General Courses, page 118.

499 MASTER'S THESIS

1-6 sem. hrs.

Refer to page 118.

Speech Communication

(See Information Sciences)

Speech Pathology and Audiology

Chairperson of the Department: Martin A. Young. Office: Fairchild Hall 204.

Teaching Staff: M. Brunt, R. Haller, J. Hufnagle, L. Hulit, B. Hutchinson, D. Richards, J. Tannahill, M. Young.

The department offers work leading to the M.A., M.S., or M.S. in Ed. degrees with emphasis in speech pathology or audiology. In addition to the general requirements of the Graduate School, the candidate for master's degree in speech pathology and audiology must meet the academic requirements for clinical certification by the American Speech and Hearing Association. These requirements presume a well-integrated undergraduate and graduate program that includes 12 semester hours in courses that provide fundamental information applicable to the normal development and use of speech, hearing, and language and 48 semester hours in courses that provide information about and training in the management of speech, hearing, and language disorders and that provide information supplementary to these fields. Master's degree students are required to take Speech Pathology and Audiology 398. Certification by the American Speech and Hearing Association requires the completion of 300 clock hours of supervised, direct clinical experience with individuals presenting a variety of disorders of communication. Certification for the public schools of Illinois also requires a master's degree, at least 66 semester hours of related undergraduate and graduate course work and 300 clock hours of supervised clinical experience, including Student Teaching 399. Students may enroll for practicum courses (PAS 317, 352, 358, 417, 458) if they are degree candidates, have a GPA of 3.00 or better on 6 or more semester hours of graduate-level departmental courses, and have the permission of the practicum instructor. A candidate for the master's degree must spend at least one full term in residence in order to qualify for the degree. A full term may be interpreted as one semester, with a class load of 8-15 hours, or a summer session with a class load of from 6-9 hours.

Courses

311 PHONETICS

3 sem. hrs.

Sound system of American speech. Standard and non-standard variations. Articulatory and acoustic considerations. Practice in transcribing and reading phonetic symbols.

316 INTRODUCTION TO ORGANIC DISORDERS OF SPEECH**3 sem. hrs.**

Speech disorders related to structural, neurological and endocrine pathologies. Diagnostic and remedial procedures. Prerequisite: Speech Pathology and Audiology 215.

317 PRACTICUM IN SPEECH PATHOLOGY**½-1 sem. hr.**

Approximately 45 hours of supervised clinical practice for each semester hour. Prerequisites: Speech Pathology and Audiology 215 and 311 and consent of instructor. May be repeated for maximum of 2 hours.

318 ORGANIZATION OF SPEECH, HEARING AND LANGUAGE PROGRAMS**3 sem. hrs.**

Professional attitudes, ethics, and organizations. Setting up and maintaining programs. Evaluation, therapy techniques, materials applicable to school settings. Relationships to school and community agencies. Prerequisite: Consent of instructor.

319 STUTTERING I**3 sem. hrs.**

Nature and history of the problem. Current models of onset, development and management. Prerequisite: Speech Pathology and Audiology 215 or consent of instructor.

320 SPEECH AND LANGUAGE DEVELOPMENT**3 sem. hrs.**

Comprehensive study of acquisition of speech and language by children. Emphasis on first six years.

350 AUDIOLOGY I**3 sem. hrs.**

Principles of hearing measurement: sound, human ear, test methods, hearing losses, screening methods, test interpretation.

351 SPEECH READING AND AUDITORY TRAINING**3 sem. hrs.**

Principle of habilitation/rehabilitation of communication disorders related to hearing impairment. Visual/auditory speech signals. Amplification: function/use.

352 PRACTICUM IN SPEECH READING AND AUDITORY TRAINING**½-1 sem. hr.**

Approximately 45 hours of supervised clinical practice for each semester hour. Prerequisite: Speech Pathology and Audiology 351. May be repeated for maximum of 2 hours.

357 PSYCHOLOGICAL IMPLICATIONS OF HEARING IMPAIRMENT**3 sem. hrs.**

Hearing impairment: survey of behavior, intelligence and personality data, parental counseling. Prerequisite: Speech Pathology and Audiology 350 or equivalent.

358 PRACTICUM IN BASIC AUDIOLOGY**½-1 sem. hr.**

Approximately 45 hours of supervised clinical practice for each semester hour. Prerequisite: Consent of instructor. May be repeated for maximum of 2 hours.

371 SPEECH SCIENCE**3 sem. hrs.**

Elementary acoustical theory and application to study of speech production and reception. Speech spectrography.

372 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM**3 sem. hrs.**

Includes effects of deviations on end product.

398 INTRODUCTION TO GRADUATE STUDY IN SPEECH PATHOLOGY AND AUDIOLOGY**3 sem. hrs.**

Introductory review of research strategy and philosophy in speech pathology and audiology for professionals who will be consumers of research literature.

414 VOICE AND ARTICULATION DISORDERS**3 sem. hrs.**

Differential diagnoses and therapeutic procedures for voice disorders and recent developments in articulation. Prerequisites: Speech Pathology and Audiology 215, 311 and 372 or equivalent.

415 SEMINAR IN LANGUAGE DISORDERS**3 sem. hrs.**

Prerequisites: Speech Pathology and Audiology 215 or 320.

417 CLINICAL PRACTICE IN SPEECH PATHOLOGY**1-6 sem. hrs.**

Supervised work in diagnosis and/or therapy. Prerequisite: Consent of instructor.

418 STUTTERING II**3 sem. hrs.**

Study of the recent research relating to stuttering and of methods of examination, diagnosis and remedial procedures. Prerequisite: Speech Pathology and Audiology 319.

419 APHASIA**3 sem. hrs.**

This course is designed to provide the student with a knowledge of the past and current research and theory on the etiologies, diagnosis of, and therapies for aphasia in children and adults. Prerequisites: Speech Pathology and Audiology 316 and 372.

441 DIRECTED READINGS IN SPEECH PATHOLOGY**1-3 sem. hrs.**

For the student who would benefit from specialized independent study which can be adapted to individual background and needs. Permission to enroll should be secured from the department chairperson and the instructor involved. May be repeated with a maximum of three hours credit. Prerequisite: Evidence of substantial background in speech pathology.

443 SYMPOSIUM IN AUDIOLOGY OR SPEECH PATHOLOGY**1-6 sem. hrs.**

For the experienced professional person in speech pathology and/or audiology or for advanced graduate students. May be repeated up to six hours. Prerequisite: Consent of the director of the symposium.

444 NEUROPATHOLOGIES OF SPEECH**3 sem. hrs.**

The nature and types of neuropathologies that have an effect on speech production, with particular emphasis given to cerebral palsy. Prerequisite: Speech Pathology and Audiology 316 or equivalent.

445 OROFACIAL ANOMALIES AND ASSOCIATED SPEECH DISORDERS**3 sem. hrs.**

Embryological growth and development and the etiologies, diagnostic and rehabilitative procedures for cleft lip and palate and associated congenital anomalies. Prerequisites: Speech Pathology and Audiology 215 and 316 or equivalent.

446 DIAGNOSTIC PROCEDURES IN SPEECH PATHOLOGY**3 sem. hrs.**

Test materials and procedures for differential diagnoses of speech and language problems.

450 ADVANCED AUDITORY TESTS**3 sem. hrs.**

The rationale, application and interpretation of advanced testing procedures; evaluation of research in special tests. Prerequisite: Speech Pathology and Audiology 350 or equivalent.

452 SPEECH AUDIOMETRY AND HEARING AIDS**3 sem. hrs.**

The examination of the theories and principles underlying the clinical management of communication disorders resulting from and related to hearing impairment, with emphasis on speech audiometry and hearing aids. Prerequisite: Speech Pathology and Audiology 350 or equivalent.

453 AUDITORY FUNCTIONS AND DISORDERS**3 sem. hrs.**

Function of the auditory mechanism with reference to theories of hearing; examination of the etiology, loci and effects of hearing pathology as it effects auditory function in adults. Prerequisite: Speech Pathology and Audiology 350 or equivalent.

455 HEARING DISORDERS IN CHILDREN**3 sem. hrs.**

A review and study of the literature in audiology and otology of the etiology, loci and effects of pathology in the auditory system of children. Prerequisite: Consent of instructor.

456 SEMINAR IN AUDIOLOGY**2-6 sem. hrs.**

Specific topics selected by the student with approval of the instructor, or assigned topics will be explored. In general, library sources will be employed; however, some experimental procedures may be approved. The student may repeat the seminar for credit provided that the subject matter is not duplicated and the total credit earned does not exceed six semester hours. Prerequisite: Consent of instructor.

458 PRACTICUM IN AUDIOLOGY**1-4 sem. hrs.**

Supervised experience in all aspects of audiology. Emphasis in one or more aspects will be permitted to suit the objectives of the student. The student may enroll more than once if the subject matter is not duplicated and the total credit earned does not exceed six semester hours. Prerequisite: Speech Pathology and Audiology 350.

471 EXPERIMENTAL PHONETICS**3 sem. hrs.**

Procedures used in the analysis of sound, particularly the sounds of spoken language, will be used in laboratory projects. Individual research projects will be encouraged.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

Theatre

Chairperson of the Department: Calvin Lee Pritner. Office: Centennial Building, West, 212.

Teaching Staff: E. Andreasen, M. Berkson, E. Bickley, J. Kirk, R. Lane, H. Langdon, D. La-Vista, C. Pritner, J. Scharfenberg, S. Schmidt, J. Sharpham, E. Stringer, F. Vybiral.

The department offers work leading to the following degrees: M.A., M.S., M.S. in Ed., and M.F.A.

Four graduate degrees are offered by the Illinois State University Theatre Department: Master of Arts, Master of Science, Master of Science in Education, and Master of Fine Arts. The Master of Arts and Master of Science degrees are general graduate degrees based on the presumption that the student should experience a broad range of courses covering most aspects of theatrical training. However, a student will ordinarily emphasize one phase of Theatre study in his course selection.

The Master of Fine Arts is a terminal degree program offering specialization in acting, costume design, creative drama, directing, playwriting, and scene design. The program is designed to prepare Theatre practitioners and teachers in the theory and practice of theatre art.

Master of Science

The Master of Science degree is awarded to a student who has completed a minimum of 32 hours in theatre or approved related courses and, has completed a thesis or passed a departmental comprehensive examination.

Master of Arts

The Master of Arts degree is awarded to a student who has completed a minimum of 32 hours in theatre or approved related courses, and has completed a thesis or passed a comprehensive examination. In addition the student must have completed the following requirements: the student must have earned credit for a minimum of two years of a foreign language at the college level, or must demonstrate a reading knowledge of a foreign language. This latter requirement is met by passing an examination administered by the foreign language department concerned. The student must have also earned a minimum of 32 semester hours of credit in Humanities and the Social Sciences in addition to work in foreign language. These requirements may be met by satisfactory work at either the graduate or undergraduate level.

Master of Fine Arts

The Master of Fine Arts is a 60-hour minimum program that emphasizes both practice and theory. Candidates must demonstrate proficiency in at least one of the following: acting, costume design, directing, playwriting, scene design, or creative drama; each candidate will be required to complete a three hour course that provides a supervised experience in college teaching; candidates must demonstrate the ability to understand the conceptual basis of their art and to articulate that understanding to others.

Typical M.F.A. Program

Students will encounter a range of experiences that will prepare them to be competent in their specialty. The M.F.A. candidate is required to complete a minimum of 12 hours in his/her studio area at ISU. Additional experiences will ordinarily include:

12 hours (from the areas of theatre history, theatre criticism and theory, and dramatic literature)

6 hours (in performance related courses outside student's specialty)

3 hours (in college teaching)

The portfolio committee may prescribe experiences in addition to the above depending on the student's demonstrated competencies.

A maximum of 12 hours may be taken in an off-campus internship program.

Each M.F.A. student is required to enroll in Theatre 501, "M.F.A. Portfolio" during each semester of residency.

Courses

300 HISTORY OF THE CINEMA

3 sem. hrs.

Historical and aesthetic development of the cinema. Lab: screening of significant films.

301 PRINCIPLES OF THEATRE EDUCATION

3 sem. hrs.

Philosophies of theatre education, teaching strategies, co-curricular programs, textbook analysis, and professional organizations.

302 CINEMA PRODUCTION

3 sem. hrs.

Principles and theory of 16 mm motion picture production. Major filmmaking as an art form of creative self-expression. Lab: produce 100 to 200 foot 16 mm silent motion pictures.

325 COSTUME CRAFTS

3 sem. hrs.

Theory and technique of costume construction

and use of special materials. Prerequisite: THE 125, consent of instructor. Course fee required.

326 VOCAL/PHYSICAL TECHNIQUE I

3 sem. hrs.

Integrated approach to actor-training, focusing on the acquisition of specific vocal/physical techniques skills: self-awareness, voice/body development, improvisation, expression.

327 VOCAL/PHYSICAL TECHNIQUE II

3 sem. hrs.

Further investigation and development of skills, experiences, methods and attitudes introduced in Vocal/Physical Technique I. Prerequisite: THE 126 or 326.

328 ADVANCED STUDIES IN VOCAL/PHYSICAL TECHNIQUE

3 sem. hrs.

Continued vocal/physical technique with emphasis on individual needs. Advanced problems: characterization, circus, ensemble, period/style movement, choreography, use of externals. Prerequisite: THE 126 and 127, or 326 and 327 or equivalent. May be repeated.

330 ADVANCED STAGE LIGHTING

3 sem. hrs.

Lighting design for proscenium and non-proscenium production; attention to system design. Prerequisites: THE 151, 251 and consent of instructor.

331 STAGE DESIGN (Formerly THE 231)

3 sem. hrs.

Nature, function, and aesthetics of scene design, with practice in composition. Prerequisites: THE 151, 251. Lab arranged.

332 ADVANCED CREATIVE DRAMA

3 sem. hrs.

In-depth work in creative drama. Includes drama experiences, examining theories, comparing teaching strategies, and developing curricula. Prerequisites: THE 232, or C&I 250 or consent of instructor.

333 CREATIVE DRAMA PRACTICUM

2-3 sem. hrs.

Students will gain practical experience in creative drama teaching by leading a class in drama under faculty supervision for a semester. Prerequisites: THE 232 or C&I 250 and consent of instructor. Course offered as credit/no credit only for undergraduates. For graduate credit, the course is graded (A-F).

334 HISTORY AND STYLES OF STAGE

COSTUMING

3 sem. hrs.

The costume's reflection of cultural and social

milieu, and the costume's application to the stage. Prerequisite: THE 125.

335 ACTING: EXPLORING

CHARACTERIZATION THROUGH ANIMAL EXERCISES

3 sem. hrs.

Techniques of actor research and characterization. Prerequisites: THE 134 or equivalent and consent of instructor. May be repeated.

336 ACTING STYLE: DISCOVERY AND PERFORMANCE

3 sem. hrs.

Analysis, rehearsal and performance technique examined through the work of a particular playwright. At least four styles are offered in most semesters. Prerequisites: THE 134 or equivalent and consent of instructor. May be repeated.

337 DIRECTING WORKSHOP

3 sem. hrs.

Principles and methodologies of stage direction applied to particular problems in a workshop format. Prerequisite: THE 237. May be repeated up to 6 hrs. toward degree program.

339 THEATRE ENCOUNTER (formerly THE 239: DRAMATIC WORKSHOP))

3 sem. hrs.

Student-initiated projects in acting, directing, design, and playwriting presented and critiqued. Emphasis is on process rather than final product. Production sources for Process Theatre. May be repeated to total 6 hrs. MFA student may enroll for credit in each term of residency.

340 ADVANCED DESIGN

3 sem. hrs.

Intensive work in the areas of design and rendering for the stage; emphasis upon new materials and techniques. Prerequisite: THE 331. May be repeated to total 6 hrs. toward master's degree. MFA student may enroll for credit in each term of residency.

341 ORAL INTERPRETATION OF

LITERATURE II

3 sem. hrs.

A study of the group forms of Interpretation — Readers Theatre and Chamber Theatre, with experiences to provide the student with practical applications of theory and principle.

343 THEATRE HISTORY I (formerly THE 335)

3 sem. hrs.

The study of drama in theatre history in the Western world from its origins to approximately 1660.

344 THEATRE HISTORY II (Formerly THE 333: MODERN DRAMA)**3 sem. hrs.**

The study of drama in theatre history in the Western world from approximately 1660 to 1875.

345 THE MODERN THEATRE**3 sem. hrs.**

Developments in stagecraft, directing, acting, and theatrical theory from late 19th century to present.

348 PLAYWRITING**3 sem. hrs.**

Playwriting techniques of selected masters with practical application of techniques in writing original plays. Also offered as ENG 348.

350 THEATRE PRACTICUM**1-3 sem. hrs.**

Application of the principles of dramatic theory to the problems of play production. May be repeated. Course offered as credit/no credit for undergraduates. For graduate credit the course is graded (A-F).

360 PRINCIPLES OF THEATRE**MANAGEMENT****3 sem. hrs.**

Course introduces and demonstrates the practices and procedures of theatre management in today's theatre. Lab arranged.

365 FILM THEORY AND CRITICISM**3 sem. hrs.**

Theories relating to art of film making. Prerequisites: THE 300, consent of instructor.

377 THEATRICAL COSTUME DESIGN**3 sem. hrs.**

Research and practical application to theatrical costume designing; use of dramatic analysis. Prerequisite: THE 125. May be repeated to total 6 hrs. toward master's degree. MFA student may enroll for credit in each term of residency.

380 DIRECTED PROJECTS**1-3 sem. hrs.**

Individually supervised study for the advanced student. Consent of instructor. May be repeated.

431 THEATRES AND AUDITORIUMS: PLANNING AND DESIGN**3 sem. hrs.**

Technical problems in stage and auditorium design and planning; emphasis on stage, lighting, and sound equipment and control. Laboratory. Prerequisite: Theatre 231.

436 SCENE STUDY**3 sem. hrs.**

This course gives entering graduate students the opportunity for an orientation to the acting program. It is used for diagnostic testing in preparation for placement.

437 SEMINAR IN PLAY DIRECTION

An examination of the principles and theories underlying good directing practice. Major theories of the past will be surveyed as well as contemporary practices.

438 DRAMA THEORY AND CRITICISM**3 sem. hrs.**

Theatre practice from the point of view of a contemporary aesthetic. Subject of investigation will change from semester to semester.

439 DRAMA FORM**3 sem. hrs.**

Attitudes toward drama form from classical Greek to modern theatre are examined from the perspective of contemporary theories of the nature of dramatic action.

444 THE BRITISH THEATRE**3 sem. hrs.**

Trends in dramatic literature and theatrical productions in England from the Medieval period to present.

445 THE AMERICAN THEATRE**3 sem. hrs.**

Development of the theatre, its dramatic literature and its arts and crafts, in America from its beginning to present.

499 MASTER'S THESIS**1-6 sem. hrs.**

Refer to page 118.

501 M.F.A. PORTFOLIO**1 sem. hr.**

M.F.A. candidate must enroll for Portfolio each semester. Meet with committee to determine area of study. Prerequisite: Admission by audition interview to M.F.A. Program.

Western European Studies

Coordinator: Walter S. G. Kohn, Department of Political Science.

Teaching Staff: R. Austensen, J. Chizmar, H. Chung, P. Couch, B. Fritzen, M. Hassan, R. Johnson, J. Koch, N. Holt, W. Kohn, E. J. Miller, V. Owen, E. Reitan, E. Schmidt, T. Shin, L. Walker, R. Whitcomb.

The Western European Studies program leads to the degree of Master of Arts. The program is designed for students who wish to pursue international careers in business or government as

well as for those who want a broader understanding of Western European affairs. The program consists of intensive training in a modern European language and course work in business, economics, geography, history, and political science.

Courses

BUSINESS ADMINISTRATION

311 GOVERNMENT REGULATIONS OF BUSINESS
3 sem. hrs.

331 CONSUMER BEHAVIOR
3 sem. hrs.

336 INTERNATIONAL MARKETING
3 sem. hrs.

344 INTERNATIONAL FINANCE
3 sem. hrs.

420 ORGANIZATION STRUCTURE AND SYSTEMS
3 sem. hrs.

421 ANALYSIS OF ORGANIZATIONAL BEHAVIOR
3 sem. hrs.

426 SEMINAR IN MANAGEMENT
3 sem. hrs.

ECONOMICS

333 OPERATIONS RESEARCH
3 sem. hrs.

345 INTERNATIONAL ECONOMICS
3 sem. hrs.

372 HISTORY OF ECONOMIC THOUGHT
3 sem. hrs.

401 SURVEY OF ECONOMIC PRINCIPLES
3 sem. hrs.

405 THEORIES OF ECONOMIC DEVELOPMENT
3 sem. hrs.

409 ECONOMIC ISSUES IN SOCIALIST ECONOMIES
3 sem. hrs.

445 INTERNATIONAL ECONOMIC ANALYSIS
3 sem. hrs.

FOREIGN LANGUAGES

Course work is available in French, German, and Spanish.

GEOGRAPHY

435 GEOGRAPHY OF WESTERN EUROPE
3 sem. hrs.

440 MEDITERRANEAN LANDS

3 sem. hrs.

470 SEMINAR IN REGIONAL GEOGRAPHY

3 sem. hrs.

HISTORY

341 EUROPEAN INTELLECTUAL HISTORY TO 1600
3 sem. hrs.

342 EUROPEAN INTELLECTUAL HISTORY SINCE 1600
3 sem. hrs.

343 MODERN EUROPEAN DIPLOMATIC HISTORY I 1789-1890
3 sem. hrs.

344 MODERN EUROPEAN DIPLOMATIC HISTORY II, 1890-PRESENT
3 sem. hrs.

345 FRENCH REVOLUTION AND NAPOLEONIC ERA, 1789-1815
3 sem. hrs.

362 MODERN BRITAIN, 1815 TO THE PRESENT
3 sem. hrs.

365 NAZI GERMANY, 1933-1945
3 sem. hrs.

402 SEMINAR IN EUROPEAN HISTORY
4 sem. hrs.

441 SEMINAR: EUROPEAN INTELLECTUAL

HISTORY

4 sem. hrs.

463 SEMINAR: MODERN FRANCE
4 sem. hrs.

466 SEMINAR: MODERN GERMANY
4 sem. hrs.

POLITICAL SCIENCE

441 SEMINAR IN COMPARATIVE POLITICS
3 sem. hrs.

451 SEMINAR IN INTERNATIONAL RELATIONS
3 sem. hrs.

452 SEMINAR IN INTERNATIONAL ORGANIZATIONS AND LAW
3 sem. hrs.

Zoology

(See Biological Sciences)

General Courses

389 SELECTED STUDIES

1-6 sem. hrs.

Course work not offered within the framework of existing departmental courses. The topic to be covered will be identified in the class schedule booklet each semester. Experimental courses and courses cutting across departmental lines may be offered as selected studies.

393 WORKSHOP

1-6 sem. hrs.

Advanced workshop for juniors, seniors, and graduate students. Credit will be given by the department offering the workshop.

397 INSTITUTE IN

1-9 sem. hrs.

Federal and state sponsored institutes or similar short term programs requiring treatment of subject matter of a special nature or for special groups.

399 ARTS AND SCIENCES MULTI-DISCIPLINARY SEMINAR

3 sem. hrs.

Intensive study in selected topics of a multi-disciplinary nature to be offered cooperatively by two or more departments.

400 INDEPENDENT STUDY

1-4 sem. hrs.

A maximum of six hours may be applied toward a master's degree. Intensive study in a special area of the advanced student's interest under a qualified member of the faculty. Each individual investigation is to culminate in a comprehensive written report and/or examination. Open only to graduate students who have completed considerable work in a degree program, who are in good academic standing, and who have demonstrated ability to profit from independent study. A written proposal approved by the faculty member, the student's advisor, and the department chairperson is required prior to registration.

475 STUDIES IN COLLEGE TEACHING

1-4 sem. hrs.

A study of the competencies necessary for effective teaching in higher education. The course consists of four components which may be taken separately or in combination. These components are: 1) roles and responsibilities of the college teacher; 2) the analysis of instruction in higher education; 3) instructional strategies and techniques; 4) the evaluation of instruction. Each student is also expected to undertake reading

and research on problems of college teaching in his area of specialization. May be repeated for credit if different components are taken. Prerequisite: Graduate standing.

489 ADVANCED STUDY

1-6 sem. hrs.

Advanced course work not offered within the framework of existing departmental courses. The topic to be covered will be identified in the class schedule booklet each semester. Experimental courses and courses cutting across departmental lines may be offered as advanced studies.

497 INTRODUCTION TO RESEARCH

METHODOLOGY

3 sem. hrs.

Selection of a research problem, collection of data, types of research, the research report and use of the library in connection with the research problem. Emphasis on understanding and interpreting frequently used statistical concepts. Provides a background for the preparation of the thesis. Enables the student to become an intelligent consumer of the products of educational research.

498 PROFESSIONAL PRACTICE

3-8 sem. hrs.

Opportunities to work with principals, superintendents, teachers and lay groups in public school situations. Of special benefit to inexperienced students and for those preparing for administrative work in public schools. Assignments are made by the Dean of the Graduate School on recommendation of the student's academic adviser at least two months prior to beginning internship.

499 MASTER'S THESIS

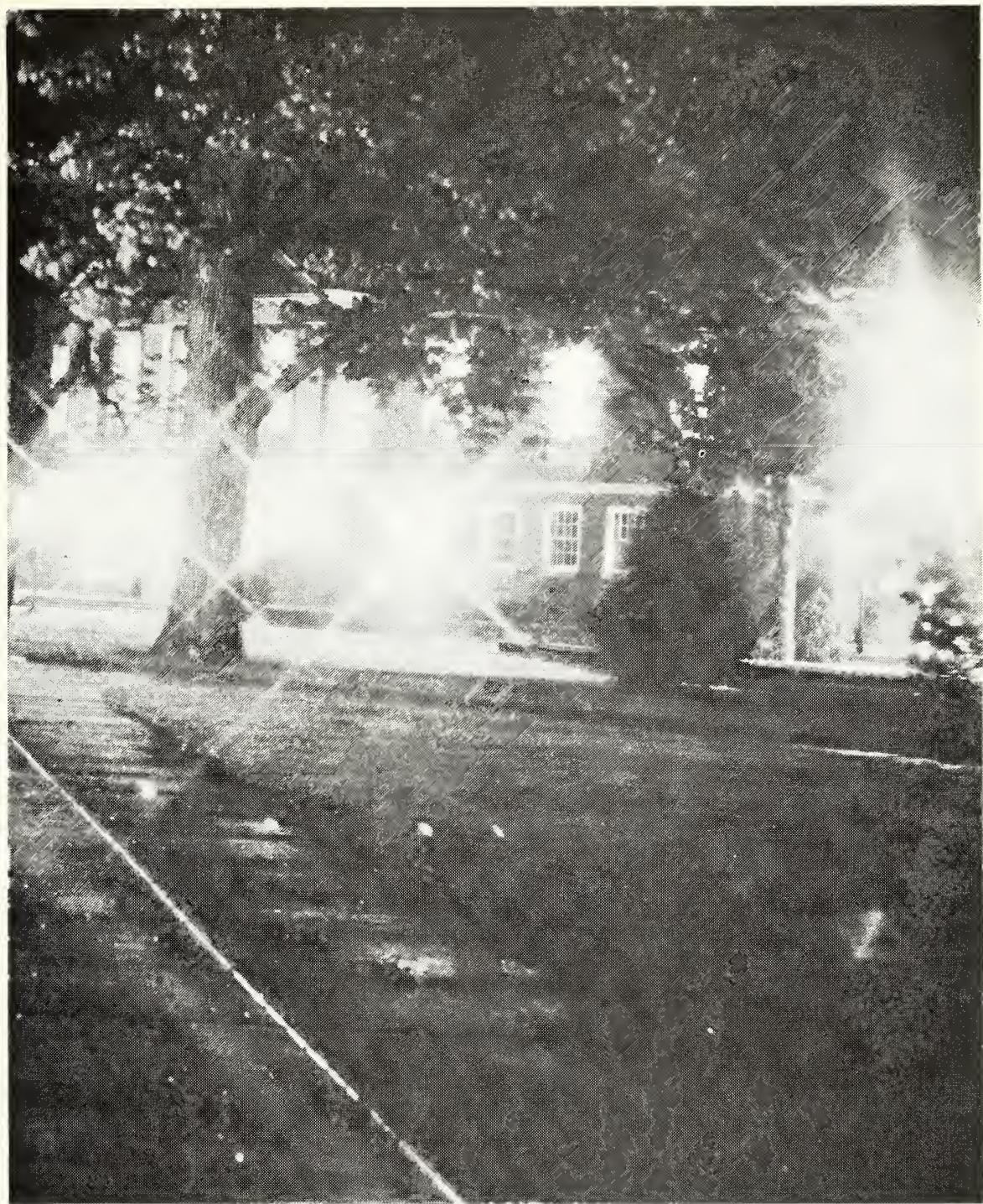
1-6 sem. hrs.

A student electing the thesis option must take from four to six hours of 499. While registration beyond six hours may be permitted for the convenience of the student, he may not count more than a total of six hours of 499 among the 32 required for the master's degree.

500 INDEPENDENT STUDY

1-4 sem. hrs.

A maximum of twelve hours may be applied toward the Master of Fine Arts, the Doctoral degrees and the Specialist Degree. Intensive study in a special area of the advanced student's interest under a qualified member of the faculty. Each individual investigation is to culminate in a comprehensive written report and/or examination. Open only to graduate students who have completed considerable work in a degree pro-



gram, who are in good academic standing, and who have demonstrated ability to profit from independent study. A written proposal approved by the faculty member, the student's adviser, and the department chairperson is required prior to registration.

589 ADVANCED DOCTORAL STUDY

Doctoral-level course work under a qualified member of the graduate faculty, in subject mat-

ter not offered within the framework of existing departmental courses. The topic to be covered will be identified in the class schedule booklet each semester.

599 DOCTORAL RESEARCH

Variable Credit

Research involving the gathering of data to form the basis of the Doctoral dissertation.

The Graduate Faculty

Ahmed A. Abdel-Halim (1970)

Associate Professor of
Management
Ph.D., University of Illinois

Wilma J. Alexander (1970)

Associate Professor of
Business Education and
Administrative Services
Ed.D., Oklahoma State
University

Richard E. Allen (1963)

Associate Professor of English
Ph.D., Washington University

Edward T. Anderson (1965)

Director of Professional
Practice Program in the
Division of Continuing
Education and Public Service
Professor of Industrial
Technology
Ed.D., University of Illinois

Frances E. Anderson (1970)

Associate Professor of Art
Ed. D., Indiana University

Roger C. Anderson (1976)

Associate Professor of Plant
Ecology
Ph.D., University of Wisconsin

Edward A. Andreasen (1967)

Professor of Theatre
M.A., Michigan State
University

Roy A. Austensen (1969)

Associate Professor of History
Ph.D., University of Illinois

Paul J. Baker (1965)

Professor of Sociology
Ph.D., Duke University

George Barford (1947)

Professor of Art
M.A., Columbia University

Buford H. Bass (1951)

Head Baseball Coach
Professor of Health, Physical
Education, Recreation, and
Dance
Ed.D., Louisiana State
University

Everett E. Bauer (1970)

Associate Professor of Special
Education
Ed.D., Illinois State University

Claude A. Bell (1956)

Associate Professor of
Industrial Technology
Ed.D., University of Missouri

Ralph A. Bellas (1965)

Associate Professor of English
Ph.D., University of Kansas

Francis B. Belshe (1948)

Vice President for Business and
Finance
Professor of Education
Ph.D., Yale University

Kenneth N. Berk (1969)

Associate Professor of
Mathematics
Ph.D., University of Minnesota

Laura E. Berk (1969)

Associate Professor of
Psychology
Ph.D., University of Chicago

Minnie P. Berson (1970)

Professor of Elementary
Education and Director of
Early Childhood Education
Programs
Ed.D., Wayne State University

C. Eric Bickley (1953)

Associate Professor of Theatre
M.S., University of Wisconsin

Dale E. Birkenholz (1962)

Professor of Ecology
Ph.D., University of Florida

Ferman Bishop (1960)

Professor of English
Ph.D., University of Wisconsin

Alton J. Bjork (1968)

Professor of Education
Ed.D., Columbia University

E. Scott Blankenship (1956)

Professor of Education
Ph.D., Ohio State University

Roger D. Blomgren (1949)

Professor of Industrial
Technology
Ed.D., University of Illinois

John K. Boaz (1965)

Associate Professor of
Information Sciences
Ph.D., Wayne State University

Charles W. Bolen (1970)

Dean of the College of Fine
Arts
Professor of Music
Ph.D., Indiana University

James W. Bommarito (1967)

Professor of Special Education
Ed.D., Wayne State University

Harold J. Born (1961)

Chairperson of the Department
of Physics
Professor of Physics
Ph.D., Iowa State University

Mack L. Bowen (1971)

Associate Professor of Special
Education
Ph.D., University of Illinois

Fay F. Bowren (1969)

Associate Professor of
Education
Ed.D., University of
New Mexico

Harold E. Boyd (1965)

Associate Professor of Art
M.F.A. University of Kansas

George J. Brabb (1976)

Chairperson of the Department
of Business Administration
Professor of Management
Ph.D., University of Illinois

Robert J. Brake (1968)

Professor of Information
Sciences
Ph.D., Michigan State
University

Benton K. Bristol (1965)

Professor of Agriculture
Ed.D., Pennsylvania State
University

Herman E. Brockman (1963)

Professor of Genetics
Ph.D., Florida State University

Irene T. Brosnahan (1968)

Associate Professor of English
Ph.D., Georgetown University

Leger N. Brosnahan (1968)

Associate Professor of English
Ph.D., Harvard University

Francis R. Brown (1949)

Director of Credit Programs in
the Division of Continuing
Education and Public Service
Assistant Director of Summer
Sessions
Professor of Mathematics
Ed.D., University of Illinois

Lauren E. Brown (1967)

Associate Professor of
Vertebrate Zoology
Ph.D., University of Texas

R. Elizabeth Brown (1955)

Professor of Psychology
Ph.D., Northwestern
University

Leonard A. Brubaker (1964) Associate Professor of Elementary Education Ph.D., Ohio State University	Robert M. Chasson (1965) Associate Professor of Botany Ph.D., University of Missouri	Carrol B. Cox (1961) Assistant Professor of English Ph.D., University of Michigan
Michael A. Brunt (1972) Associate Professor of Speech, Pathology, and Audiology Ph.D., University of Kansas	Patricia A. Chesebro (1963) Associate Professor of Psychology Ph.D., University of Illinois	Virginia R. Crafts (1967) Professor of Health, Physical Education, Recreation, and Dance Ed.D., Columbia University
Gene A. Budig (1972) President of the University Professor of Educational Administration Ed.D., University of Nebraska	Wilbur W. Chrudimsky (1970) Associate Professor of Plant and Soil Science Ph.D., Oklahoma State University	John F. Cragan (1973) Acting Chairperson of the Department of Information Sciences Associate Professor of Information Sciences Ph.D., University of Minnesota
Clinton R. Bunke (1967) Professor of Education Ph.D., University of Iowa	Tsan-lang Chuang (1967) Associate Professor of Botany Ph.D., University of California at Berkley	John C. Cralley (1963) Assistant Professor of Zoology Ph.D., University of Illinois
Roger K. Bunting (1966) Associate Professor of Chemistry Ph.D., Pennsylvania State University	Hoon M. Chung (1970) Associate Professor of Political Science Ph.D., University of Pennsylvania	Kenneth J. Crepas (1970) Associate Professor of Insurance Ph.D., University of Iowa
Robert A. Burnham (1976) Dean of the College of Education Professor of Educational Administration Ph.D., Stanford University	Stanley R. Clemens (1968) Assistant Professor of Mathematics Ph.D., University of North Carolina	John E. Crew (1963) Professor of Physics Ph.D., University of Illinois
Thomas E. Caldwell (1970) Professor of Special Education Ed.D., University of Kansas	A. Kay Clifton (1968) Assistant Professor of Sociology Ph.D., University of Iowa	Robert L. Crist (1962) Professor of Psychology Ph.D., Purdue University
Wesley C. Calef (1970) Professor of Geography Ph.D., University of Chicago	Ira Cohen (1965) Associate Professor of History Ph.D., New York University	John H. Crotts (1968) Professor of Elementary Education Ed.D., University of Missouri
R. Jerry Cantlon (1962) Professor of Education Ed.D., University of Colorado	James E. Collie (1957) Professor of Health, Physical Education, Recreation, and Dance P.E.D., Indiana University	Harold D. Crouse (1976) Dean of Division of Continuing Education and Public Service Ph.D., University of Wisconsin
Robin L. Carr (1968) Assistant Professor of English Ph.D., University of Illinois	Thomas E. Comfort (1965) Professor of French Ph.D., University of Illinois	Norton B. Crowell (1969) Professor of English Ph.D., Harvard University
Dorothy H. Carrington (1961) Affirmative Action Officer for Women Associate Professor of Psychology Ed.D., Florida State University	Robert K. Conyne (1971) Counselor in the Student Counseling Services Associate Professor of Education Ph.D., Purdue University	Richard D. Crumley (1962) Associate Professor of Mathematics Ph.D., University of Chicago
Valjean M. Cashen (1961) Professor of Psychology Ed.D., University of Northern Colorado	Roque J. Cordero (1972) Professor of Music B.A., Hamline University	Robert G. Culbertson (1976) Chairperson of the Department of Corrections Associate Professor of Corrections Ph.D., University of Cincinnati
Merritt M. Chambers (1966) Professor of Educational Administration Ph.D., Ohio State University	Arthur B. Corra (1971) Professor of Music Mus. D., Indiana University	Alfred A. Culver (1961) Professor of Agriculture Ph.D., Purdue University
Roger J. Champagne (1960) Professor of History Ph.D., University of Wisconsin	Peter D. Couch (1970) Professor of Management Ph.D., University of Wisconsin	George E. Cunningham (1973) Assistant Professor of History M.S., University of Wisconsin

Richard H. Dammers (1971)
Associate Professor of English
Ph.D., University of
Notre Dame

Donald E. Davis (1964)
Associate Professor of History
Ph.D., Indiana University

F. James Davis (1971)
Professor of Sociology
Ph.D., University of Iowa

Louise E. Dieterle (1969)
Director of Clinical
Experiences in Teacher
Education
Professor of Educational
Administration
Ed.D., Loyola University

Eleanor Dilks (1952)
Professor of Zoology
Ph.D., University of Wisconsin

Paul F. Dohrmann (1961)
Professor of Health, Physical
Education, Recreation, and
Dance (Metcalf Elementary
School)
Ph.D., University of Iowa

John A. Dossey (1967)
Associate Professor of
Mathematics
Ph.D., University of Illinois

Thelbert Drake (1973)
Chairperson of the Department
of Curriculum and
Instruction
Professor of Education
Ed.D., Michigan State
University

Pauline S. Drawver (1956)
Associate Professor of English
Ph.D., University of Illinois

Robert L. Duncan (1961)
Associate Professor of English
Ph.D., Indiana University

Robert C. Duty (1963)
Professor of Chemistry
Ph.D., University of Iowa

Kay P. Easson (1970)
Associate Professor of English
Ph.D., University of Tulsa

Roger R. Easson (1970)
Associate Professor of English
Ph.D., University of Tulsa

Leo E. Eastman (1954)
Associate Secretary of the
University
Professor of Education
Ed.D., University of
North Dakota

David C. Eaton (1969)
Associate Professor of
Sociology
Ph.D., University of Texas

Charles W. Edwards (1964)
Professor of Educational
Administration
Ph.D., University of Iowa

Clifford H. Edwards (1968)
Professor of Education
Ed.D., University of Utah

Thomas F. Edwards (1957)
Professor of Elementary
Education
Ed.D., Michigan State
University

Elwood F. Egelston (1962)
Professor of Educational
Administration
Ed.D., University of Oregon

Lawrence C. Eggan (1968)
Professor of Mathematics
Ph.D., University of Oregon

Ray E. Eiben (1967)
Professor of Education
Ph.D., Ohio State University

Thomas E. Eimermann (1970)
Associate Professor of
Political Science
Ph.D., University of Illinois

Donald H. Erickson (1969)
Associate Professor of English
Ph.D., University of Illinois

John M. Ewing (1969)
Professor of Elementary
Education
Ed.D., University of Nebraska

Lloyd W. Farlee (1962)
Professor of Music
Ph.D., University of Iowa

A. Gordon Ferguson (1964)
Associate Professor of Spanish
Ph.D., University of Nebraska

John W. Ferrell (1961)
Professor of Music
Ph.D., University of Iowa

Mary Z. Ferrell (1972)
Associate Professor of
Sociology
Ph.D., Louisiana State
University

Odies C. Ferrell (1974)
Associate Professor of
Marketing
Ph.D., Louisiana State
University

Frederic N. Firestone (1970)
Professor of Economics
Ph.D., University of Wisconsin

Kenneth L. Fitch (1963)
Associate Professor of
Anatomy
Ph.D., University of Michigan

Thomas C. Fitch (1969)
Associate Professor of
Elementary Education
Ph.D., Michigan State
University

Eugene D. Fitzpatrick (1965)
Professor of Psychology
Ed.D., University of
Northern Colorado

George W. Forgey (1967)
Chairperson of the Department
of Agriculture
Associate Professor of
Agricultural Mechanics
Ph.D., Illinois State University

Charles P. Frahm (1968)
Professor of Physics
Ph.D., Georgia Institute of
Technology

John B. Freed (1969)
Associate Professor of History
Ph.D., Princeton University

John L. Frehn (1962)
Professor of Physiology
Ph.D., Pennsylvania State
University

Ruth M. Freyberger (1951)
Professor of Art
Ed.D., Pennsylvania State
University

Stephen H. Friedberg (1970)
Associate Professor of
Mathematics
Ph.D., Northwestern
University

Walter H. Friedhoff (1958)
Professor of Psychology
Ph.D., University of Iowa

William Frinsko (1961)
Professor of Elementary
Education
ED.D., Wayne State
University

William D. Fuehrer (1963)
Associate Professor of German
(University High School)
Ph.D., University of Michigan

Frederick W. Fuess (1963)
Professor of Plant and Soil
Science
Ph.D., Michigan State
University

Neal R. Gamsky (1970) Vice President and Dean of Student Affairs Professor of Psychology Ph.D., University of Wisconsin	Stanley E. Grupp (1957) Professor of Sociology Ph.D., Indiana University	E. Franklin Harrison (1974) Dean of the College of Business Professor of Management Ph.D., University of Washington
Raymond E. George (1970) Professor of Art M.A. in Education, University of Northern Iowa	Kwang-Chul Ha (1967) Associate Professor of Mathematics Ph.D., University of North Carolina	Richard R. Hart (1961) Professor of Geology Ph.D., University of Iowa
Noel C. Gill (1970) Associate Professor of Psychology Ph.D., University of Minnesota	Bessie D. Hackett (1969) Associate Professor of Home Economics Ed.D., University of Illinois	W. Douglas Hartley (1954) Associate Professor of Art Ph.D., New York University
Victor E. Gimmestad (1948) Professor of English Ph.D., University of Wisconsin	William W. Haddad (1970) Associate Professor of History Ph.D., Ohio State University	Mostafa F. Hassan (1968) Professor of Economics Ph.D., University of Wisconsin
William J. Gnagy (1961) Professor of Psychology Director Educational Research Services Ph.D., Wayne State University	Dean S. Hage (1959) Acting Chairperson of the Department of Special Education Professor of Special Education Ph.D., University of Iowa	G. Louis Heath (1969) Associate Professor of Education Ph.D., University of California, Berkeley
John T. Goeldi (1967) Professor of Elementary Education Ph.D., Michigan State University	Ronald S. Halinski (1968) Director of Measurement and Evaluation Service Associate Professor of Education Ph.D., University of Iowa	John M. Heissler, Jr. (1961) Professor of English Ph.D., University of Illinois
Russell D. Gorman (1976) Chairperson of the Department of Health, Physical Education, Recreation, and Dance Professor of Physical Education P.E.D., Indiana University	John D. Hall (1970) Associate Professor of Business Education and Administrative Services Ed.D., Texas Tech. University	Arlan C. Helgeson (1951) Professor of History Ph.D., University of Wisconsin
Joseph L. Grabil (1968) Professor of History Ph.D., Indiana University	James A. Hallam (1966) Chairperson of the Department of Accounting Professor of Accounting Ph.D., University of Iowa; C.D.P.	Robert E. Hemenway (1964) Professor of Special Education Ed.D., Boston University School of Education
Charles E. Gray, Jr. (1959) Professor of History Ed.D., University of Illinois	Tong Il Han (1971) Professor of Music M.S., Juilliard School of Music	Reginald D. Henry (1969) Professor of Agricultural Mechanics Ph.D., University of Missouri
Harold L. Gregor (1970) Professor of Art Ph.D., Ohio State University	John F. Hansen (1972) Assistant Professor of Chemistry Ph.D., Duke University	Richard J. Hentz (1967) Associate Professor of Art M.F.A., Northern Illinois University
Ivo P. Greif (1961) Professor of Elementary Education Ed.D., Wayne State University	Warren R. Harden (1954) Assistant Vice President Director of Institutional Research and Computer Operations Professor of Economics Ph.D., Indiana University	Howard R. Hetzel (1962) Chairperson of the Department of Biological Sciences Professor of Zoology Ph.D., University of Washington
Charles T. Griffin (1974) Assistant Professor of Sociology Ph.D., Iowa State University	Charles B. Harris (1968) Associate Professor of English Ph.D., Southern Illinois University	Charles R. Hicklin (1960) Professor of Education Ed.D., University of Illinois
Jim L. Grimm (1974) Associate Professor of Marketing D.B.A., Kent State University		G. Alan Hickrod (1967) Professor of Educational Administration Ed.D., Harvard University
Audrey J. Grupe (1968) Associate Professor of Psychology Ph.D., University of Illinois		John S. Hill (1962) Professor of English Ph.D., University of Wisconsin
		Jack A. Hobbs (1970) Associate Professor of Art Ph.D., University of Iowa

Robert A. Hogan (1963) Professor of Psychology Ed.D., Case Western Reserve University	Raymond H. Hunt (1965) Associate Professor of Chemistry Ph.D., University of Illinois	Edward B. Jelks (1968) Professor of Anthropology Ph.D., University of Texas
Kenneth A. Holder (1969) Associate Professor of Art M.F.A., School of the Art Institute of Chicago	Mary K. Huser (1966) Director of Non-Credit Programs in the Division of Continuing Education and Public Service Professor of Elementary Education Ed.D., University of Illinois	D. Reed Jensen (1966) Associate Professor of Physiology Ph.D., Utah State University
Robert E. Holdridge (1965) Associate Professor of Information Sciences Ed.D., Indiana University	H. Dean Hustuft (1969) Assistant Professor of Information Sciences Ed.D., Indiana University	Kenneth E. Jesse (1967) Associate Professor of Physics Ph.D., Arizona State University
M. Paul Holsinger (1969) Professor of History Ph.D., University of Denver	Barbara B. Hutchinson (1966) Associate Professor of Speech, Pathology, and Audiology Ph.D., University of Utah	Milford C. Jochums (1948) Professor of English Ph.D., University of Illinois
Niles R. Holt (1968) Associate Professor of History Ph.D., Yale University	Virgil R. Hutton (1960) Associate Professor of English Ph.D., University of Michigan	James J. Johnson (1966) Associate Professor of Psychology Ph.D., Northwestern University
Gerlof D. Homan (1968) Chairperson of the Department of History Professor of History Ph.D., University of Kansas	Thaddeus C. Ichniowski (1961) Professor of Chemistry Ph.D., Purdue University	John L. Johnston (1956) Professor of Industrial Technology Ed.D., University of Missouri
Joseph C. Honan (1968) Associate Professor of Political Science Ph.D., University of Missouri	E. Carmen Imel (1964) Associate Professor of Health, Physical Education, Recreation, and Dance Ph.D., University of Iowa	H. Twyman Jones (1967) Associate Professor of Education Ed.D., University of Missouri
James M. Horner (1975) Vice President and Provost of the University Professor of Mathematics Ph.D., University of Alabama	Arnold J. Insel (1969) Associate Professor of Mathematics Ph.D., University of California at Berkeley	Margaret L. Jones (1956) Professor of Health, Physical Education, Recreation, and Dance Ph.D., University of Wisconsin
James E. House (1966) Professor of Chemistry Ph.D., University of Illinois	Eugene R. Irving (1969) Professor of Elementary Education Ed.D., University of Illinois	Steven E. Kagle (1969) Associate Professor of English Ph.D., University of Michigan
Quinn L. Hrudka (1962) Associate Professor of Education Ed.D., Indiana University	Irving Jacks (1968) Professor of Psychology Ph.D., New York University	Frederick D. Kagy (1965) Professor of Industrial Technology Ed.D., University of Wyoming
Lucy Jen Huang (1967) Professor of Sociology Ph.D., University of Chicago	Ted R. Jackson (1969) Associate Professor of Information Sciences Ph.D., University of Wisconsin	Alfred L. Kaisershot (1970) Associate Professor of Business Education and Administrative Services Ed.D., University of Nebraska
Benjamin C. Hubbard (1961) University Professor of Educational Administration Ed.D., University of Alabama	Alvin R. Jacobson (1970) Director of Environmental Health Professor of Environmental Health Ph.D., University of Iowa	Jacqueline Q. Karch (1957) Professor of Home Economics Ed.D., Washington University
Harry W. Huizinga (1967) Associate Professor of Parasitology Ph.D., University of Connecticut	Kenneth E. James (1962) Professor of Agricultural Education Ed.D., University of Missouri	Benjamin J. Keeley (1952) Professor of Sociology Ph.D., University of Nebraska
Lloyd M. Hulit (1972) Assistant Professor of Speech, Pathology, and Audiology Ph.D., Ohio State University		Kenneth C. Kennard (1968) Professor of Philosophy Ph.D., Northwestern University
		Larry D. Kennedy (1962) Professor of Education Ed.D., University of Illinois

Betty J. Keough (1952) Professor of Health, Physical Education, Recreation, and Dance Ph.D., University of Iowa	Gurcharan S. Laumas (1973) Professor of Economics Ph.D., Wayne State University	Laurene Mabry (1960) Director of Women's Intercollegiate Athletics Professor of Health, Physical Education, Recreation, and Dance Ph.D., University of Iowa
Robert J. Kerber (1974) Associate Professor of Management D.B.A., Texas Tech. University	Joseph L. Laurenti (1962) Professor of Spanish and Italian Ph.D., University of Missouri	Normand W. Madore (1961) Professor of Elementary Education Ed.D., Wayne State University
John W. Kirk (1966) Professor of Theatre Ph.D., University of Florida	Ronald L. Laymon (1965) Professor of Educational Administration Ed.D., Indiana University	Thomas E. Malone (1969) Associate Professor of Art M.S., University of Wisconsin
Keith P. Knoblock (1967) Assistant Professor of Art M.F.A., Ohio State University	Dorothy E. Lee (1962) Chairperson of the Department of Sociology-Anthropology Associate Professor of Sociology Ph.D., University of Iowa	Thomas B. Martin (1962) Professor of Business Education and Administrative Services Ed.D., Indiana University
James V. Koch (1967) Chairperson of the Department of Economics Professor of Economics Ph.D., Northwestern University	Kenneth L. Leicht (1967) Associate Professor of Psychology Ph.D., Northwestern University	Franklin G. Matsler (1968) Executive Director of the Board of Regents Professor of Higher Education Ph.D., University of California at Berkeley
Robert W. Koehler (1961) Professor of Health, Physical Education, Recreation, and Dance Ed.D., University of Utah	Elmer A. Lemke (1965) Professor of Psychology Ph.D., University of Wisconsin	Paul F. Mattingly (1962) Professor of Geography Ph.D., Pennsylvania State University
Frederick W. Kohlmeyer (1964) Professor of History Ph.D., University of Minnesota	Wilbert M. Leonard, II (1970) Associate Professor of Sociology Ph.D., Ohio State University	David J. MacDonald (1971) Assistant Professor of History Ph.D., University of Minnesota
Walter S.G. Kohn (1956) Professor of Political Science Ph.D., New School for Social Research, New York, New York	Marjorie L. Lewis (1951) Associate Professor of Psychology Ph.D., University of Illinois	Richard W. Mawdsley (1969) Associate Professor of Art M.F.A., University of Kansas
Joe W. Kraus (1966) Director of Libraries Professor of Library Science Ph.D., University of Illinois	Anthony E. Liberta (1961) Professor of Mycology Ph.D., University of Illinois	Robert E. McAdam (1970) Director of the Office of Research Services and Grants Professor of Health, Physical Education, Recreation, and Dance Ph.D., University of Illinois
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